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OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 12:36:51 ; Search time 66.4446 Seconds

(without alignments)
5888.223 Million cell updates/sec

Title: US-09-285-306-3

Perfect score: 705

Sequence: 1 cccaggacgaggagcgc.....ggcgatcgacgcggcgacgt 705

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA:*

- 1: /cgn2_6/ptodata/2/ina/5A COMB.seq:*
- 2: /cgn2_6/ptodata/2/ina/5B COMB.seq:*
- 3: /cgn2_6/ptodata/2/ina/6A COMB.seq:*
- 4: /cgn2_6/ptodata/2/ina/6B COMB.seq:*
- 5: /cgn2_6/ptodata/2/ina/PCTUS COMB.seq:*
- 6: /cgn2_6/ptodata/2/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	555	78.7	3447	2	US-08-313-185-57
5	555	78.7	3447	3	US-09-082-614A-57
6	541.4	76.8	970	1	US-08-250-030-1
7	541.4	76.8	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	4	US-08-520-946-135
11	530.4	75.2	620	4	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	2	US-08-757-653-136
14	528.8	75.0	620	2	US-08-757-653-137
15	528.8	75.0	620	2	US-08-757-653-139
16	528.8	75.0	620	2	US-08-757-653-140
17	528.8	75.0	620	2	US-08-520-946-136
18	528.8	75.0	620	4	US-08-520-946-137
19	528.8	75.0	620	4	US-08-520-946-139
20	528.8	75.0	620	4	US-08-520-946-140
21	528.8	75.0	620	4	US-09-655-378A-136
22	528.8	75.0	620	4	US-09-655-378A-137
23	528.8	75.0	620	4	US-09-655-378A-139
24	528.8	75.0	620	4	US-09-655-378A-140
25	528.8	75.0	620	4	US-09-655-378A-141
26	454.4	64.5	706	3	US-08-797-812-25
27	367.6	52.1	4074	4	US-09-252-991A-4737

28 367.6 52.1 4092 4 US-09-252-991A-4771
 29 337.6 47.9 4083 4 US-09-489-039A-22
 c 30 337.6 47.9 4206 4 US-09-489-039A-30
 31 295 41.8 432 2 US-08-313-185-59
 32 295 41.8 432 3 US-09-082-614A-59
 33 284.6 40.4 324 4 US-08-750-088A-36
 34 284.6 40.4 324 4 US-09-722-319-36
 35 263.6 37.4 2964 4 US-09-540-236-1097
 36 263.6 37.4 31063 4 US-09-596-002-20
 37 262.4 37.2 4167 4 US-09-543-681A-3177
 38 257.2 36.5 319 4 US-08-750-088A-35
 39 257.2 36.5 319 4 US-09-722-319-35
 c 40 249 35.3 11935 4 US-09-634-238-401
 c 41 242.8 34.4 1830121 4 US-09-557-884-1
 c 42 242.8 34.4 1830121 4 US-09-643-390A-1
 c 43 240 34.0 4143 4 US-09-328-352-4006
 c 44 240 34.0 14672 4 US-08-961-527-111
 45 226.4 32.1 329 4 US-08-750-088A-34

ALIGNMENTS

RESULT 1

US-08-797-812-24
 ; Sequence 24, Application US/08797812
 ; Patent No. 6228575
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingeras, Thomas A.
 ; APPLICANT: Mack, David
 ; APPLICANT: Chee, Mark S.
 ; APPLICANT: Berno, Anthony J.
 ; APPLICANT: Stryer, Lubert
 ; APPLICANT: Ghandour, Ghassan
 ; APPLICANT: Wang, Ching
 ; TITLE OF INVENTION: Chip-Based Species Identification and
 ; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms
 ; NUMBER OF SEQUENCES: 36
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Townsend and Townsend and Crew LLP
 ; STREET: Two Embarcadero Center, 8th floor
 ; CITY: San Francisco
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 94111
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC Compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/797,812
 ; FILING DATE: 07-FEB-1997
 ; CLASSIFICATION: 435
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 60/017,765
 ; FILING DATE: 15-MAY-1996
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 08/629,031
 ; FILING DATE: 08-APR-1996
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 60/012,631
 ; FILING DATE: 01-MAR-1996
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 60/011,339
 ; FILING DATE: 08-FEB-1996
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Fitts, Renee A.
 ; REGISTRATION NUMBER: 35,136
 ; REFERENCE/DOCKET NUMBER: 16528X-018550
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 415-326-2400
 ; TELEFAX: 415-326-2422


```
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.0%; Pred. No. 7.5e-108;
Matches 636; Conservative 3; Mismatches 60; Indels 0; Gaps 0;

QY      1  CCCAGGAGCTGGAGCGGATCACACGACAGACCCCTGATCAACATCGTCCCGTCTGTGGCGG 60
DB      761003  CCCAGGAGCTGGAGCGGATCACACGACAGCTTGATCAACATCGGCGCGTGTGGCGG 761062

QY      61  CGATCAAGGAGTTCTTCCGGACACCGCCAGCTGTCCCAGTTTCATGGACAGAACACCGCG 120
DB      761063  CGATCAAGGAGTTCTTCCGGACACCGCCAGCTGTGAGCCAAATTCATGACCAGAACACCGCG 761122

QY      121  TGTCCGGGCTCACCCACAGCGCGCTGTTCGGCGCTGGGCGCGGTGGTCTGCCGGG 180
DB      761123  TGTCCGGGCTTACCCACAGCGCGCTGTTCGGCGCTGGGCGCGGTGTGTCAGGTG 761182

QY      181  AGCGGGCGGGCTGGAGTCCGCGACGTGACCCGCTCCACTACGCGCGGATGTGCCGA 240
DB      761183  AGCGTCCGGGCTGGAGTCCGCGACGTGACCCGCTCCACTACGCGCGGATGTGCCGA 761242

QY      241  TCGAGACCCCGGAGGTTCCCAACATCGGTCTGATGGCTCGCTGTGCGGTGTACGCGGG 300
DB      761243  TCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTACGCGGG 761302

QY      301  TCAACCGGTTCCGGTTTATCGAGACGCGGTACCGCAAGGTGGTACGCGGCGTGTACCG 360
DB      761303  TCAACCGGTTCCGGTTTATCGAAACGCGGTACCGCAAGGTGGTACGCGGCGTGTACCG 761362

QY      361  ACAGATCCACTACTGACCCGACGAGGAGGACCGCACGTGTGTGGCGAGGCCAACT 420
DB      761363  ACAGATCGTGTACTGACCCGCGACGAGGAGGACCGCACGTGTGTGGCGAGGCCAACT 761422

QY      421  CGCGATCGACGGCAAGGCGCGGTTCGCCGAGGCGCGGTTCTGTTCGCCCGCAAGGCGG 480
DB      761423  CGCGGATCGATCGGACGCGTTCGTCGAGCGCGCGTGTGTTCGCCCGCAAGGCGG 761482

QY      481  CGGAGTTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGACNTKTCSCGCGCCARA 540
DB      761483  CGGAGTTCGAGTACGTGCCCTCGTCTGAGTGGACTACATGAGCTCTCGCCCGCCARA 761542

QY      541  TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGACGACCGCCAAACCGTGCC 600
DB      761543  TGGTGTCCGTGGCCACCGCGATGATTCCTTCCTGAGCAGACGACCGCCAAACCGTGCC 761602

QY      601  TGATGGCGCCCAACATGCAKCGCCAGGCGGTTTCGCTGGTGCAGCGANGCGCGCTGG 660
DB      761603  TCATGGGGCAAAACATGCAKCGCCAGGCGGTTTCGCTGGTGCAGCGANGCGCGCTGG 761662

QY      661  TGGGACCGGATGAGCTGCGCGGGCGGATGACGCGG 699
DB      761663  TGGGACCGGATGAGCTGCGCGGGCGGATGACGCGG 761701

RESULT 4
US-08-313-185-57
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; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amelio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-313-185-57

Query Match      78.7%; Score 555; DB 2; Length 3447;
Best Local Similarity 86.7%; Pred. No. 1e-98;
Matches 606; Conservative 3; Mismatches 90; Indels 0; Gaps 0;

QY      1  CCCAGGAGCTGGAGCGGATCACCGCAGACCCCTGATCAACATCGTCCCGTCTGTGGCGG 60
DB      1124  CCCAGGAGCTGGAGCGGATCACCGCGCAGACCGCTGATCAATATCGTCCGTGTGGCGG 1183

QY      61  CGATCAAGGAGTTCTTCGGCACACGACGAGTGTCCAGTTTCATGACACAGAACACCGCG 120
DB      1184  CTATCAAGGAGTTCTTCGGCACACGACGAGTGTCCAGTTTCATGATCAGAACACCCCTC 1243

QY      121  TGTCCGGGCTCACCCACAAAGCGCGCTGTCCGGCGCTGGGCGCGGTGTGTCTGCCGG 180
DB      1244  TGTCCGGGCTGACCCACACAGCGCGGCTGTCCGGCGCTGGGCGCGGTGTGTCTGCCGTG 1303

QY      181  AGCGGGCGGGCTGGAGTCCGCGACGTGACCCGTCACCGTCCCACTAGCGCGGATGTGCCGA 240
DB      1304  AGCGTCCGGGCTAGAGTCCGCGACGTGACCGTCACTTCGCACTAGCGCGGATGTGCCGA 1363

QY      241  TCGAGACCCCGAGGTCCTCCCAACATCGGTCTGTCGCGCTCGCTGTCTGCTACGCGCGG 300
DB      1364  TCGAGACTCCCGAGGTCCTCCCAACATAGGTCTGATCGGTTCATTTGCGGTGTACGCGCGG 1423

QY      301  TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTTCAGCGCGCTGTACCG 360
DB      1424  TCAACCCGTTCCGGTTTCATCGAACAACCGTACCGCAAGTGGTTGACGGTGTGGTCAGCG 1483
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/ ZIP: 55402
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA: US/08/250,030
/ APPLICATION NUMBER: US/08/250,030
/ FILING DATE: 26-MAY-1994
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Muetting, Ann M.
/ REGISTRATION NUMBER: 33,977
/ REFERENCE/DOCKET NUMBER: 150.105US1
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 612-339-3061
/ TELEFAX: 612-339-3061
/ INFORMATION FOR SEQ ID NO: 1:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 970 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA
/ US-08-250-030-1

Query Match 76.8%; Score 541.4; DB 1; Length 970;
Best Local Similarity 90.8%; Pred. No. 4e-96;
Matches 572; Conservative 3; Mismatches 55; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGGCGATCACACGACAGCCCTGATCAACATCCGTCCTCCGTCGTGGCGG 60
DB 341 CCCAGGAGCTGGAGGCGATCACACGACAGCTTGATCAACATCCGTCGTGGTCGCG 400

QY 61 CGATCAAGGAGTTCTTCGGACACGAGCCAGTGTCCCAGTTCATGGACAGAACACCCGC 120
DB 401 CGATCAAGGAGTTCTTCGGACACGAGCCAGTGTAGCCAAATTCATGGACAGAACACCCGC 460

QY 121 TGTCCGGGCTCACCCACAAAGCCGCTGTTCGGCGCTGGGCGCGGTTGTTCGCCGGG 180
DB 461 TGTCCGGGTTACCCACAAAGCCGCTGTTCGGCGCTGGGCGCGGTTGTTCGCCGGG 520

QY 181 AGCGGGCGGGCTGGAGTTCGCGACGACCGTCCACCTCCAGTCCAGTCCGCGGATGTCGCCGA 240
DB 521 AGCGTGC CGGCTGGAGAGCGGACGAGTGCACCGCTCCACTACGCGCGGATGTCGCCGA 580

QY 241 TCGAGACCCCGAGGTTCTTCGGACACGAGCCAGTGTCCCAGTTCATGGACAGAACACCCGC 300
DB 581 TCGAAACCCCTGAGGGGCCCAACATCGGTCGCTGTGTCGCTGTCGCTGTGTCGCTGTCGCTG 640

QY 301 TCAACCCGCTTCGGGTTTCATCGAGAGCGGTCATCGAGAGCGGTCGAGAGTGTGTCACCG 360
DB 641 TCAACCCGCTTCGGGTTTCATCGAGAGCGGTCATCGAGAGCGGTCGAGAGTGTGTCACCG 700

QY 361 ACGAGATCCACTACTCTGACCGCGGACGAGGAGGACCGCACGTCGTGGTGGCGAGGCCAACT 420
DB 941 TCATGGGGCGCAACATGCAKCGCCAGGCGG 630

/
/
/ ZIP: 55402
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA: US/08/250,030
/ APPLICATION NUMBER: US/08/250,030
/ FILING DATE: 26-MAY-1994
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Muetting, Ann M.
/ REGISTRATION NUMBER: 33,977
/ REFERENCE/DOCKET NUMBER: 150.105US1
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 612-339-3061
/ TELEFAX: 612-339-3061
/ INFORMATION FOR SEQ ID NO: 1:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 970 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA
/ US-08-250-030-1

Query Match 76.8%; Score 541.4; DB 1; Length 970;
Best Local Similarity 90.8%; Pred. No. 4e-96;
Matches 572; Conservative 3; Mismatches 55; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGGCGATCACACGACAGCCCTGATCAACATCCGTCCTCCGTCGTGGCGG 60
DB 341 CCCAGGAGCTGGAGGCGATCACACGACAGCTTGATCAACATCCGTCGTGGTCGCGC 400

QY 61 CGATCAAGGAGTTCTTCGGACACGAGCCAGTGTCCCAGTTCATGGACAGAACACCCGC 120
DB 401 CGATCAAGGAGTTCTTCGGACACGAGCCAGTGTAGCCAAATTCATGGACAGAACACCCGC 460

QY 121 TGTCCGGGCTCACCCACAAAGCCGCTGTTCGGCGCTGGGCGCGGTTGTTCGCCGGG 180
DB 461 TGTCCGGGTTACCCACAAAGCCGCTGTTCGGCGCTGGGCGCGGTTGTTCGCCGGG 520

QY 181 AGCGGGCGGGCTGGAGTTCGCGACGACCGTCCACCTCCAGTCCAGTCCGCGGATGTCGCCGA 240
DB 521 AGCGTGC CGGCTGGAGAGCGGACGAGTGCACCGCTCCACTACGCGCGGATGTCGCCGA 580

QY 241 TCGAGACCCCGAGGTTCTTCGGACACGAGCCAGTGTCCCAGTTCATGGACAGAACACCCGC 300
DB 581 TCGAAACCCCTGAGGGGCCCAACATCGGTCGCTGTGTCGCTGTCGCTGTGTCGCTGTCGCTG 640

QY 301 TCAACCCGCTTCGGGTTTCATCGAGAGCGGTCATCGGCAAGTGTGTCAGCGGTTGTCACCG 360
DB 641 TCAACCCGCTTCGGGTTTCATCGAAACCGCGTACCGCAAGTGTGTCAGCGGTTGTTAGCG 700

QY 361 ACGAGATCCACTACTCTGACCGCGGACGAGGAGGACCGCACGTCGTGGTGGCGAGGCCAACT 420
DB 701 ACGAGATCGTGTACTGACCGCGGACGAGGAGGACCGCACGTCGTGGTGGCGAGGCCAACT 760

QY 421 CGCCGATCGAGGCAAGGCGCGGTTTCGCGAGGCGCGGTTGTCGCGCGGACGAGGCGG 480
DB 761 CGCCGATCGATGCGGACCGTTCGTTTCGTCGAGCGCGGTCGTCGTCGCGCGGAGGCGG 820

QY 481 GCGAGGTGAGTACGTCGCTTCGTCGAGGTTGGAATCATGAGCAATXTCGCGCGGCCARA 540
DB 821 GCGAGGTGAGTACGTCGCTTCGTCGAGGTTGGAATCATGAGCAATXTCGCGCGGCCARA 880

QY 541 TGGTTCGCTGGCCACCGCGATGATCCGTTTCCTCGAGACGACGACGACGACGTCGCGCC 600
DB 881 TGGTTCGCTGGCCACCGCGATGATTCCTTCCTGGAGCAACGACGACGACGTCGCGCC 940

QY 601 TGATGGGGCGCAACATGCAKCGCCAGGCGG 630
DB 941 TCATGGGGCGCAACATGCAKCGCCAGGCGG 970
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Db 701 ACAGATCGTGTACTACCGCGGACGAGGAGGACCGCCACGCTGGTGGACAGACGCAATT 760
QY 421 CGCCGATCGACGCGCAAGGCGCGGTTCGCGAGGCGCGGCTGCTGCTCGCGCGCAAGCGG 480
Db 761 CGCCGATCGATCGGAGCGGTGCTGCTCGAGCGCGCGGTGCTGCTCGCGCGCAAGCGG 820
QY 481 GCAGAGTCGAGTACGTCGCCCTCGTCGAGGTGAGTACATGAGACNTKTCSCCGCGCARA 540
Db 821 GCAGAGTCGAGTACGTCGCCCTCGTCGAGGTGAGTACATGAGACNTKTCSCCGCGCARA 880
QY 541 TGTGTGTCGTCGCGACCGGATGATCCGTTCTCGAGACGACGACGACCAACCGTGCCC 600
Db 881 TGTGTGTCGTCGCGACCGGATGATCCGTTCTCGAGACGACGACGACCAACCGTGCCC 940
QY 601 TGATGGCGCCAAACATGCAKCGCGCGG 630
Db 941 TCATGGGGCAACATGCGCGCGCGG 970

RESULT 8

US-08-757-653-135
; Sequence 135, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-135

Query Match 75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 90.5%; Pred. No. 5.2e-94;
Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;
QY 36 ATCAACATCGTCCGTCGTGGCGGATCAAGAGTTCTTGGACACGACGAGTGTC 95
Db 1 ATCAACATCGGCGCGGTGTCGCGCGATCAAGAGTTCTTGGACACGACGAGTGAGC 60
QY 96 CAGTTTCATGACAGAAACAAACCGGTGTCGGGCTCACCCACAAAGCGCGCTGTCGGG 155
Db 61 CAATTATGACAGAAACAAACCGGTGTCGGGCTGACCCACAAAGCGCGACTGTCGGG 120

QY 156 CTGGGCGCGGTGCTGTCTCCCGGAGCGGGCTGGAGTCCGCGACGTCGACCCG 215
Db 121 CTGGGCGCGGTGCTGTCTCACGTGAGCGTGGCGGTGGAGTCCGCGACGTCGACCCG 180
QY 216 TCCCACTACGCGCGGATGTCGCCGATCGAGACCCCGGAGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCATACGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGTCCTGTCGTGTCGCGCGGTCAACCCGTTCCGGTTTCATCGAGACGCGGTACCCG 335
Db 241 GGTCCTGTCGTGTCGCGCGGTCAACCCGTTCCGGTTTCATCGAAACGCGGTACCCG 300
QY 336 AAGTGTGTCGAGCGGTGTCACCGGAGATCCACTACTGACCGCGCGAGGAGGAC 395
Db 301 AAGTGTGTCGAGCGGTGTCACCGGAGATCCACTACTGACCGCGCGAGGAGGAC 360
QY 396 CGCCACGTGTCGCGCGGCAACTCGCGATCGAGCGCAAGGCGCGGTTCGCCGAGGCC 455
Db 361 CGCCACGTGTCGCGCGGCAACTCGCGATCGAGCGCGGTTCGCCGAGGCC 420
QY 456 CGGTCCTGTCGCGCGGCAAGGCGCGGAGGTGAGTACGTCGCCCTCGTCGAGGTTGGAC 515
Db 421 CGGTCCTGTCGCGCGGCAAGGCGCGGAGGTGAGTACGTCGCCCTCGTCGAGGTTGGAC 480
QY 516 TACATGACNTKTCSCCGCGCARATGTCGTCGTCGCCACCGCGATGATCCGTTCTCCTC 575
Db 481 TACATGACNTKTCSCCGCGCARATGTCGTCGTCGCCACCGCGATGATCCGTTCTCCTC 540
QY 576 GAGCACGACGCGCAACCGTCGCCCTGATGGGCGCAACATGCAKCGCGCGGTTCG 635
Db 541 GAGCACGACGCGCAACCGTCGCCCTGATGGGCGCAACATGCAKCGCGCGGTTCG 600
QY 636 CTGGTCCGCGAGCGCGCC 655
Db 601 CTGGTCCGCGAGCGCGCC 620

RESULT 9

US-08-757-653-138/c
; Sequence 138, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:

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; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-138

Query Match          75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 90.5%; Pred. No. 5.2e-94;
Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCGCTCCGTCGTCGGCGGCGATCAAGAGTCTCTCGGCACAGCCAGCTGCC 95
DB 620 ATCAACATCGCGCGGTGGTCGCGCGATCAAGAGTCTCTCGGCACAGCCAGCTGAGC 561

QY 96 CAGTTTCATGACCAAGAACACCCGCTCTCGGGGTCAACCCACAGCGCGCTCTCGGG 155
DB 560 CAATTATGACCAAGAACACCCGCTCTCGGGGTGACCCACAGCGCGGACTGTGCGG 501

QY 156 CTGGGCGCGGTGTGTCTCTCCGGGAGCGGGCTGAGGTTCGCGAGTCCGAGTGCACCG 215
DB 500 CTGGGCGCGGTGTGTCTCTCGGGGTGAGGTTCGCGAGTCCGAGTGCACCG 441

QY 216 TCCCACTACGCGCGGTGTGTCTCTCGGGGTGAGGTTCGCGAGTCCGAGTGCATC 275
DB 440 TCGCACTACGCGCGGTGTGTCTCTCGGGGTGAGGTTCGCGAGTCCGAGTGCATC 381

QY 276 GGCTCGCTGTCTCGGTGTACGGCGGCTCAACCCGTTTCGAGTTCATCGAGCGCGTACCGC 335
DB 380 GGCTCGCTGTCTCGGTGTACGGCGGCTCAACCCGTTTCGAGTTCATCGAAACCGCTACCGC 321

QY 336 AAGTGTGTGACGCGGTGTGTACCGAGATCACTACCTGACCGCGCGAGAGGAGAC 395
DB 320 AAGTGTGTGACGCGGTGTGTACCGAGATCGTGTACCTGACCGCGCGAGAGGAGAC 261

QY 396 CGCCACGTGTGGCGAGGCGCACTCGCCGATCGACGCGAGGCGGTTCGCGAGGCGC 455
DB 260 CGCCACGTGTGGCGAGGCGCAATTCGCCGATCGATCGCGCGGTTCGTCGAGCGCG 201

QY 456 CGGTGTGTGTCTCGCGCGCAAGCGGCGAGGTTCGAGTACGTGCGCTCTCGAGGTGGAC 515
DB 200 CGGTGTGTGTCTCGCGCGCAAGCGGCGAGGTTCGAGTACGTGCGCTCTCGAGGTGGAC 141

QY 516 TACATGACNTKTCSCCGCGCABATGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTC 575
DB 140 TACATGACGTCTCGCGCGCAGATGGTGTGCGTGGCCACCGCGATGATTCCTTCTCCTG 81

QY 576 GAGCAGACGACGCGCAACCGTGCCTGATGGCGCCACATGCAKCGCGAGCGGTTCGG 635
DB 80 GAGCAGACGACGCGCAACCGTGCCTCATGGGGGCAAAATGCAKCGCGAGCGGTTCGG 21

QY 636 CTGTTGCGCAGCGANGCGCC 655
DB 20 CTGTTGCGTAGCGAGGCCCC 1

RESULT 10
US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
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Db 601 CTGGTCCTAGCGAGGCC 620

RESULT 11
US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-520-946-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 90.5%; Pred. No. 5.2e-94;
Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCCTGGCGGCGATCAAGGAGTTCTTCGGACCAAGCGGTTTCGCGAGGCC 95
Db 620 ATCAACATCCGCGGTGTCTCGCGGATCAAGGAGTTCTTCGGACCAAGCGGTTTCGCGAGGCC 561

QY 96 CAGTTTCATGGACCAAGCAACCGCTGTCTGGGGTCAACCAAGCGCGCTGTCTGGCG 155
Db 560 CAATTTCATGGACCAAGCAACCGCTGTCTGGGGTCAACCAAGCGCGCTGTCTGGCG 501

QY 156 CTGGCCCGGGTGTCTGTCTCGCGGAGCGCGGCTGAGGTCTGGCGACGTGCAACCG 215
Db 500 CTGGCGCGCGGTGTCTGTCTGAGTGTCTGGCGGCTGAGGTCTGGCGACGTGCAACCG 441

QY 216 TCCCACTACGCGCGGTGTCTGTCTGAGTGTCTGGCGGCTGAGGTCTGGCGACGTGATC 275
Db 440 TCGCACTACGCGCGGTGTCTGTCTGAGTGTCTGGCGGCTGAGGTCTGGCGACGTGATC 381

QY 276 GGTCTGCTGTCTGAGTGTCTGAGGTTCAACCGTTTCGCGGTTTCATGAGACCGGTACCGC 335
Db 360 GCTCTGCTGTCTGAGTGTCTGAGGTTCAACCGTTTCGCGGTTTCATGAGACCGGTACCGC 321

QY 336 AAGTGTGTCTGAGCGGTGTCTGAGTGTCTGAGGTTCAACCGTTTCGCGGTTTCATGAGACCG 395
Db 320 AAGTGTGTCTGAGCGGTGTCTGAGTGTCTGAGGTTCAACCGTTTCGCGGTTTCATGAGACCG 261

QY 396 CGCCACGTGTCTGGCGGCGGCAACTCTGCCGATCGACGGCAAGGGCGGTTTCGCGAGGCC 455
Db 260 CGCCACGTGTCTGGCGGCGGCAACTCTGCCGATCGATCGGACGGTTCGTTCTGTCGAGCCG 201

QY 456 CGGGTGTCTGTCTGGCGGCGGCAAGGGCGGAGGTGAGTGTCTGCGGCGGTTTCGCGAGGTGAC 515
Db 200 CGGTGTCTGTCTGGCGGCGGCAAGGGCGGAGGTGAGTGTCTGCGGCGGTTTCGCGAGGTGAC 141

QY 516 TACATGACNTKTCSCCGCGCCARATGGTGTCTGGTGGCCACCGCGATGATCCCGTTCTTC 575
Db 140 TACATGACNTKTCSCCGCGCCARATGGTGTCTGGTGGCCACCGCGATGATCCCGTTCTTC 81

QY 576 GAGCAG 635
Db 80 GAGCAG 21

QY 636 CTGGTCCTAGCGAGGCC 655
Db 20 CTGGTCCTAGCGAGGCC 1

RESULT 12
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
; US-09-655-378A-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 90.5%; Pred. No. 5.2e-94;
Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCCTGGCGGCGATCAAGGAGTTCTTCGGACCAAGCGGTTTCGCGAGGCC 95
Db 1 ATCAACATCCGCGGTGTCTCGCGGATCAAGGAGTTCTTCGGACCAAGCGGTTTCGCGAGGCC 60

QY 96 CAGTTTATGACGACGACAAACCCGCTCTCGGGGCTACCCACGAGCGCGCGCTGTGGCG 155
Db 61 CAATTATGACGACGACAAACCCGCTCTCGGGGTTGACCCACGAGCGCGCGCTGTGGCG 120
QY 156 CTGGGCGCGGCTGTCTGTCGCGGAGCGGCGGGGTGAGGTCGCGAGCTGCACCG 215
Db 121 CTGGGCGCGGCTGTCTGTCGAGCGGTGCGGGGTGAGGTCGCGAGCTGCACCG 180
QY 216 TCCCACTACGCGCGGATGTGCCCGATCGAGACCCCGGAGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGCTCGTGTCTGTCAGCGCGGCTCAACCCGTTCCGGTTTCATCGAGACCGGTACCG 335
Db 241 GGCTCGTGTCTGTCAGCGCGGCTCAACCCGTTCCGGTTTCATCGAAACCGCGGTACCG 300
QY 336 AAGTGTGTGACGCGGTGTTCACGACGAGATCCACTACCTGACCGCGCGAGGAGGAC 395
Db 301 AAGTGTGTGACGCGGTGTTCAGCAGAGATCGTGTACCTGACCGCGCGAGGAGGAC 360
QY 396 CGCCACGTGTGGCGGAGGCAACTCGCCGATCGACGCGCAAGGCGCGGTTTCGCGAGGCC 455
Db 361 CGCCACGTGTGGCACAGGCAATTCGCCGATCGCGAGCGTTCGTCGAGCGG 420
QY 456 CGGTCGTGTCTCGCCCGACGAGCGGAGGTTCAGTACGTGCGCTTCGCGAGGTGAC 515
Db 421 CGGTCGTGTCTCGCCCGACGAGCGGAGGTTCAGTACGTGCGCTTCGTCGAGGTGAC 480
QY 516 TACATGACGACGACGACGACGACGACGACGACGACGACGACGACGACGACGACGACGAC 575
Db 481 TACATGACGACGACGACGACGACGACGACGACGACGACGACGACGACGACGACGACGAC 540
QY 576 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 635
Db 541 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 600
QY 636 CTGGTGGCAGCGANGCGCC 655
Db 601 CTGGTGGCAGCGANGCGCC 620

RESULT 13

US-09-655-378A-138/c

; Sequence 138, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 138:

US-09-655-378A-138

Query Match

75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 90.5%; Pred. No. 5.2e-94;

Matches 561; Conservative 3; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCGTCGCGCGGATCAAGAGATTCTTCGCGACACAGCAGCTGTCC 95
Db 620 ATCAACATCCGTCGTCGCGCGGATCAAGAGATTCTTCGCGACACAGCAGCTGTCC 561
QY 96 CAGTTTCAATGACGACGACAAACCCGCTGTTCGGGGCTACCCACAGCGCGCGCTGTCCGCG 155
Db 560 CAATTCAATGACGACGACAAACCCGCTGTTCGGGGTTGACCCACAGCGCGCGCTGTCCGCG 501
QY 156 CTGGGCGCGGCTGTCTGTCGCGGAGCGGCGCGGCTGAGGTCGCGGAGCTGCACCG 215
Db 500 CTGGGCGCGGCTGTCTGTCGCGGAGCGGCGCGGCTGAGGTCGCGGAGCTGCACCG 441
QY 216 TCCCACTACGCGCGGATGTCGCGATCGAGACCGCGAGGTCCTCAACATCGGTCTGATC 275
Db 440 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381
QY 276 GGCTCGTGTCTGTCGCGCGGCTCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGC 335
Db 380 GGCTCGTGTCTGTCGCGCGGCTCAACCCGTTTCGGGTTTCATCGAAACGCGGTACCGC 321
QY 336 AAGTGTGTGACGCGGTGTTCACGAGATCAGTACCTGACCGCGCGGAGGAGGAC 395
Db 320 AAGTGTGTGACGCGGTGTTCACGAGATCAGTACCTGACCGCGCGGAGGAGGAC 261
QY 396 CGCCACGTGTGGCGGAGGCAACTCGCCGATCGACGCGAGGCGCGGTCGCGGAGGCC 455
Db 260 CGCCACGTGTGGCACAGGCAATTCGCCGATCGATCGGACGCGTTCGTCGAGCGG 201
QY 456 CGGTCGTGTCTCGCCCGCAAGCGGCGGAGTGCAGTACGTCGCGCTTCGTCGAGGTGAC 515
Db 200 CGGTCGTGTCTCGCCCGCAAGCGGCGGAGTGCAGTACGTCGCGCTTCGTCGAGGTGAC 141
QY 516 TACATGACGACGACGACGACGACGACGACGACGACGACGACGACGACGACGACGACGAC 575
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QY 576 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 635
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QY 636 CTGGTGGCAGCGANGCGCC 655
Db 20 CTGGTGGCAGCGANGCGCC 1

RESULT 14

US-08-757-653-136

; Sequence 136, Application US/08757653

; Patent No. 5843669

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

; APPLICANT: Lyamichev, Victor I.

; APPLICANT: Lyamichev, Natasha

; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases

; NUMBER OF SEQUENCES: 190

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/ CORRESPONDENCE ADDRESS:
/ ADDRESSER: Medlen & Carroll, LLP
/ STREET: 220 Montgomery Street, Suite 2200
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: United States Of America
/ ZIP: 94104
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patent In Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ FILING DATE: US/08/757,653
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Ingolia, Diane E.
/ REGISTRATION NUMBER: 40,027
/ REFERENCE/DOCKET NUMBER: FORS-02565
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 705-8410
/ TELEFAX: (415) 397-8338
/ INFORMATION FOR SEQ ID NO: 136:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 620 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: double
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA (genomic)
/ US-08-757-653-136

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.3%; Pred. No. 1.1e-93;
Matches 560; Conservative 3; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCCTCGTGGCGGATCAAGAGTTCTTCGGCACACAGCGAGTGTCC 95
DB 1 ATCAACATCCGCGGTGTGCGCGGATCAAGAGTTCTTCGGCACACAGCGAGTGTCC 60
QY 96 CAGTTTCATGGACCAAGAACCCCGTGTGGGGCTCAACCAAGCGCGCTGTGGCG 155
DB 61 CAATTTCATGGACCAAGAACCCCGTGTGGGGCTCAACCAAGCGCGCTGTGGCG 120
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QY 276 GGTCTGCTGTTCGGTGTACCGCGGGTCAACCCCGTTCGGGTTCATCGAGACCGGTACCCG 335

CORRESPONDENCE ADDRESS:
/ ADDRESSER: Medlen & Carroll, LLP
/ STREET: 220 Montgomery Street, Suite 2200
/ CITY: San Francisco
/ STATE: California
/ COUNTRY: United States Of America
/ ZIP: 94104
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patent In Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ FILING DATE: US/08/757,653
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Ingolia, Diane E.
/ REGISTRATION NUMBER: 40,027
/ REFERENCE/DOCKET NUMBER: FORS-02565
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: (415) 705-8410
/ TELEFAX: (415) 397-8338
/ INFORMATION FOR SEQ ID NO: 137:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 620 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: double
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA (genomic)
/ US-08-757-653-137

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.3%; Pred. No. 1.1e-93;
Matches 560; Conservative 3; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCCTCGTGGCGGATCAAGAGTTCTTCGGCACACAGCGAGTGTCC 95
DB 1 ATCAACATCCGCGGTGTGCGCGGATCAAGAGTTCTTCGGCACACAGCGAGTGTCC 60
QY 96 CAGTTTCATGGACCAAGAACCCCGTGTGGGGCTCAACCAAGCGCGCTGTGGCG 155
DB 61 CAATTTCATGGACCAAGAACCCCGTGTGGGGCTCAACCAAGCGCGCTGTGGCG 120
QY 156 CTGGGCGCGGTGTGTCTCCCGGAGCGGGCTGGAGTCCGACCGTGCACCCG 215
DB 121 CTGGGCGCGGTGTGTCTCCCGGAGCGGGCTGGAGTCCGACCGTGCACCCG 180
QY 216 TCCCACTACGGCCGGATGTGCCCGATCGAGACCCCGAGGGTCCCAACATCGTCTGATC 275
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QY 276 GGTCTGCTGTTCGGTGTACCGCGGGTCAACCCCGTTCGGGTTCATCGAGACCGGTACCCG 335
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Qy	396	CGCCACGTGTGGCGGAGGCCAATCGCCGATCGACGCGAGGGCGCGTTCCGCCGAGGCC	455
Db	361	CGCCACGTGTGGCGGAGGCCAATCGCCGATCGATGGGACGGTTCGTCGAGCGG	420
Qy	456	CGGTGTGTGTCCCGCGCAAGCGGGGAGGTGAGTACGTGCCCTCGTCGAGGTGAC	515
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Qy	516	TACATGGACNTKTCSCCGCGCCARATGGTGTGCGTGGCCACCGCGATGATCCCGTTCTC	575
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Db	541	GAGCACGACGACGCCAACCGTGCCTCATGGGGGCAACATGCAKCGCGCGGTTCCG	600
Qy	636	CTGGTGGCGAGCGANGGCC	655
Db	601	CTGGTGGCGAGCGANGGCC	620

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Job time : 78.4446 secs

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OM nucleic - nucleic search, using sw model

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(without alignments)
8488.468 Million cell updates/sec

Title: US-09-285-306-3

Perfect score: 705

Sequence: 1 ccaggacgtggagcgatc.....ggcgatcgacgcggcgacgt 705

Scoring table: IDENTITY_NUC

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Searched: 3228839 seqs, 2456066551 residues

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Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

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- 9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq.*
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- 19: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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5	695	98.6	705	9	US-09-285-306-7
6	695	98.6	705	9	US-09-285-306-8
7	695	98.6	705	9	US-09-285-306-9
8	695	98.6	705	9	US-09-285-306-12
9	695	98.6	705	9	US-09-285-306-13
10	695	98.6	705	9	US-09-285-306-14
11	695	98.6	705	9	US-09-285-306-16
12	695	98.6	705	9	US-09-285-306-17
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16	681	96.6	3444	13	US-10-282-122A-25737	Sequence 25737, A
17	677	96.0	687	9	US-09-285-306-18	Sequence 18, Appl
18	677	96.0	687	9	US-09-285-306-19	Sequence 19, Appl
19	677	96.0	687	9	US-09-285-306-20	Sequence 20, Appl
20	677	96.0	687	9	US-09-285-306-21	Sequence 21, Appl
21	677	96.0	687	9	US-09-285-306-22	Sequence 22, Appl
22	677	96.0	687	9	US-09-285-306-23	Sequence 23, Appl
23	677	96.0	687	9	US-09-285-306-25	Sequence 25, Appl
24	677	96.0	687	9	US-09-285-306-27	Sequence 27, Appl
25	656.6	93.1	705	9	US-09-285-306-143	Sequence 143, Appl
26	655	92.9	705	9	US-09-285-306-144	Sequence 144, Appl
27	651.8	92.5	705	9	US-09-285-306-87	Sequence 87, Appl
28	651.8	92.5	705	9	US-09-285-306-88	Sequence 88, Appl
29	651.8	92.5	705	9	US-09-285-306-90	Sequence 90, Appl
30	651.8	92.5	705	9	US-09-285-306-92	Sequence 92, Appl
31	651.8	92.5	705	9	US-09-285-306-96	Sequence 96, Appl
32	651.8	92.5	705	9	US-09-285-306-181	Sequence 181, Appl
33	650.6	92.3	705	9	US-09-285-306-84	Sequence 84, Appl
34	650.6	92.3	705	9	US-09-285-306-86	Sequence 86, Appl
35	650.6	92.3	705	9	US-09-285-306-93	Sequence 93, Appl
36	650.6	92.3	705	9	US-09-285-306-94	Sequence 94, Appl
37	650.6	92.3	705	9	US-09-285-306-95	Sequence 95, Appl
38	649	92.1	705	9	US-09-285-306-85	Sequence 85, Appl
39	649	92.1	705	9	US-09-285-306-89	Sequence 89, Appl
40	649	92.1	705	9	US-09-285-306-91	Sequence 91, Appl
41	638.6	90.6	687	9	US-09-285-306-146	Sequence 146, Appl
42	638.6	90.6	687	9	US-09-285-306-148	Sequence 148, Appl
43	634.6	90.0	705	9	US-09-285-306-75	Sequence 75, Appl
44	633.8	89.9	687	9	US-09-285-306-100	Sequence 100, Appl
45	632.2	89.7	687	9	US-09-285-306-99	Sequence 99, Appl

ALIGNMENTS

RESULT 1
US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Dreknow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-3

Query Match 99.5%; Score 701.4; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2.1e-151;

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGCGTGGGCGGATCACACCGAGACCCCTGATCAACATCGTCCCGTGGGGG 60

DB 1 CCCAGGCGTGGGCGGATCACACCGAGACCCCTGATCAACATCGTCCCGTGGGGG 60

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QY 61 CGATCAAGAGATTCTTCGGGACACAGCCAGTGTGCCAGTTTCATGACCAAGAAACAACCCGC 120
Db 61 CGATCAAGAGATTCTTCGGGACACAGCCAGTGTGCCAGTTTCATGACCAAGAAACAACCCGC 120
QY 121 TGTGCGGGGCTCACCCACAGAGCCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
Db 121 TGTGCGGGGCTCACCCACAGAGCCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
QY 131 AGCGGCGCGGGTGTGAGGTCCCGAGTGTGACCCCGTCCCACTACGGCCCGGATGTGCCCGA 240
Db 131 AGCGGCGCGGGTGTGAGGTCCCGAGTGTGACCCCGTCCCACTACGGCCCGGATGTGCCCGA 240
QY 241 TCAGACCCCGGAGGTTCACCAATCGTCTGATTCGGTCTCGCTGTGAGTGTACGCGGGG 300
Db 241 TCAGACCCCGGAGGTTCACCAATCGTCTGATTCGGTCTCGCTGTGAGTGTACGCGGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTGCGACGGCGTGTCAACG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTGCGACGGCGTGTCAACG 360
QY 361 ACAGATCCACTACCTGACCGCGACGAGAGGACCGCCACCGTGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACCTGACCGCGACGAGAGGACCGCCACCGTGTGGCGAGGCCAACT 420
QY 421 CGCGGATCGAGCGCAAGGGCCGTTCCGCGAGGCCCGGGTGTGCTGGTCCCGCGCAAGCGG 480
Db 421 CGCGGATCGAGCGCAAGGGCCGTTCCGCGAGGCCCGGGTGTGCTGGTCCCGCGCAAGCGG 480
QY 481 GCAGGTTCAGTACGTGCGCTTCGCGAGGTGACTACATGGAACNTKTCSCCGCGCCARA 540
Db 481 GCAGGTTCAGTACGTGCGCTTCGCGAGGTGACTACATGGAACNTKTCSCCGCGCCARA 540
QY 541 TGTGTGCGTGGCCACCGGATGATCCCGTTCCTCGAGACGACGACGCAACCGTGCCC 600
Db 541 TGTGTGCGTGGCCACCGGATGATCCCGTTCCTCGAGACGACGACGCAACCGTGCCC 600
QY 601 TGATGGCGCCACATGCAKCGCCAGCGGTTCGCGTGTGGTGGCGAGGCGCGCGCTGG 660
Db 601 TGATGGCGCCACATGCAKCGCCAGCGGTTCGCGTGTGGTGGCGAGGCGCGCGCTGG 660
QY 661 TGGGACCCGCGATGAGCTGCGCGCGCGGATCGACGCGGCGAGT 705
Db 661 TGGGACCCGCGATGAGCTGCGCGCGCGGATCGACGCGGCGAGT 705
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RESULT 2

```
US-09-285-306-4
; Sequence 4, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: Fast-Seq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-4
```

Query Match 98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 6.1e-150;
Matches 695; Conservative 4; Mismatches 16; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGATCACACCGAGCCCTGTATCAACATCCGTCAGTCTGTGGCGG 60

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Db 1 CCCAGGACGTGGAGGCGATCACACCGAGCCCTGTATCAACATCCGTCAGTCTGTGGCGG 60
QY 61 CGATCAAGAGATTCTTCGGGACACAGCCAGTGTGCCAGTTTCATGACCAAGAAACAACCCGC 120
Db 61 CGATCAAGAGATTCTTCGGGACACAGCCAGTGTGCCAGTTTCATGACCAAGAAACAACCCGC 120
QY 121 TGTGCGGGGCTCACCCACAGAGCCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
Db 121 TGTGCGGGGCTCACCCACAGAGCCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGGTGTGAGGTCCCGAGTGTGACCCCGTCCCACTACGGCCCGGATGTGCCCGA 240
Db 181 AGCGGCGCGGGTGTGAGGTCCCGAGTGTGACCCCGTCCCACTACGGCCCGGATGTGCCCGA 240
QY 241 TCAGACCCCGGAGGTTCACCAATCGTCTGATTCGGTCTCGCTGTGAGTGTACGCGGGG 300
Db 241 TCAGACCCCGGAGGTTCACCAATCGTCTGATTCGGTCTCGCTGTGAGTGTACGCGGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTGCGACGGCGTGTCAACG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGTGCGACGGCGTGTCAACG 360
QY 361 ACAGATCCACTACCTGACCGCGACGAGAGGACCGCCACCGTGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACCTGACCGCGACGAGAGGACCGCCACCGTGTGGCGAGGCCAACT 420
QY 421 CGCGGATCGAGCGCAAGGGCCGTTCCGCGAGGCCCGGGTGTGCTGGTCCCGCGCAAGCGG 480
Db 421 CGCGGATCGAGCGCAAGGGCCGTTCCGCGAGGCCCGGGTGTGCTGGTCCCGCGCAAGCGG 480
QY 481 GCAGGTTCAGTACGTGCGCTTCGCGAGGTGACTACATGGAACNTKTCSCCGCGCCARA 540
Db 481 GCAGGTTCAGTACGTGCGCTTCGCGAGGTGACTACATGGAACNTKTCSCCGCGCCARA 540
QY 541 TGTGTGCGTGGCCACCGGATGATCCCGTTCCTCGAGACGACGACGCAACCGTGCCC 600
Db 541 TGTGTGCGTGGCCACCGGATGATCCCGTTCCTCGAGACGACGACGCAACCGTGCCC 600
QY 601 TGATGGCGCCACATGCAKCGCCAGCGGTTCGCGTGTGGTGGCGAGGCGCGCGCTGG 660
Db 601 TGATGGCGCCACATGCAKCGCCAGCGGTTCGCGTGTGGTGGCGAGGCGCGCGCTGG 660
QY 661 TGGGACCCGCGATGAGCTGCGCGCGCGGATCGACGCGGCGAGT 705
Db 661 TGGGACCCGCGATGAGCTGCGCGCGCGGATCGACGCGGCGAGT 705
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RESULT 3

```
US-09-285-306-5
; Sequence 5, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: Fast-Seq for Windows Version 3.0
; SEQ ID NO 5
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-5
```

Query Match 98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 6.1e-150;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

Query Match 98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 6.1e-150;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGCGATCACACGACAGCCCTGATCAACATCCGTCCTCGTGGCGG 60
DB 1 CCAGAGCTGGAGGCGATCACACGACAGCCCTGATCAACATCCGTCAGTGGCGG 60
QY 61 CGATCAAGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAACCCGC 120
DB 61 CGATCAAGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAACCCGC 120
QY 121 TGTGGGGGTACCCACAGAGCGGCTGTGGCGCTGGGCGCGGTGTGTCTCCCGG 180
DB 121 TGTGGGGGTACCCACAGAGCGGCTGTGGCGCTGGGCGCGGTGTGTCTCCCGG 180
QY 181 AGCGGCGCGGTGGAGGTCCGGAGTGCACCCGTCCTACCTACGCGCGGATGTGCCGA 240
DB 181 AGCGGCGCGGTGGAGGTCCGGAGTGCACCCGTCCTACCTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGTTCCAAATCGTCTGATCGGCTCGTGTACGCGCGG 300
DB 241 TCGAGACCCCGAGGTTCCAAATCGTCTGATCGGCTCGTGTACGCGCGG 300
QY 301 TCACCCGTTGGGTTTCATCGAGACCGCTACCGCAAGGTGGTCGACGGGTGGTCA 360
DB 301 TCACCCGTTGGGTTTCATCGAGACCGCTACCGCAAGGTGGTCGACGGGTGGTCA 360
QY 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTCGTGGCGAGGCCAACT 420
DB 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTCGTGGCGAGGCCAACT 420
QY 421 CGCGGATCGACGAAAGGCGGTTTCGGAGGCGCGGTGTGGTCCGCGGCGG 480
DB 421 CGCGGATCGACGAAAGGCGGTTTCGGAGGCGCGGTGTGGTCCGCGGCGG 480
QY 481 GCGAGTCCAGTACGTGCGCTTCGCGAGGTGGACTACATGGACNTKTCSCCGCGC 540
DB 481 GCGAGTCCAGTACGTGCGCTTCGCGAGGTGGACTACATGGAGTGTGCGCGCGC 540
QY 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACCCGTCGCC 600
DB 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACCCGTCGCC 600
QY 601 TGATGGCGCCAAATCGACGCGGCTTCGCTGTGGTGGCGAGCGCGCGCTGG 660
DB 601 TGATGGCGCCAAATCGACGCGGCTTCGCTGTGGTGGCGAGCGCGCGCTGG 660
QY 661 TGGGCAACCGCATGGAGCTGCGCGCGGATCGACGCGGCGAGT 705
DB 661 TGGGCAACCGCATGGAGCTGCGCGCGGATCGACGCGGCGAGT 705

RESULT 6

US-09-285-306-8
; Sequence 8, Application US/09285306A
; Publication No. US20020187467A1

; GENERAL INFORMATION:
; APPLICANT: Drenkew, Jorg
; APPLICANT: Drenkew, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700S
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 705
; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-8

Query Match 98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 6.1e-150;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGCGATCACACGACAGCCCTGATCAACATCCGTCCTCGTGGCGG 60
DB 1 CCAGAGCTGGAGGCGATCACACGACAGCCCTGATCAACATCCGTCAGTGGCGG 60
QY 61 CGATCAAGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAACCCGC 120
DB 61 CGATCAAGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAACCCGC 120
QY 121 TGTGGGGGTACCCACAGAGCGGCTGTGGCGCTGGGCGCGGTGTGTCTCCCGG 180
DB 121 TGTGGGGGTACCCACAGAGCGGCTGTGGCGCTGGGCGCGGTGTGTCTCCCGG 180
QY 181 AGCGGCGCGGTGGAGGTCCGGAGTGCACCCGTCCTACCTACGCGCGGATGTGCCGA 240
DB 181 AGCGGCGCGGTGGAGGTCCGGAGTGCACCCGTCCTACCTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGTTCCAAATCGTCTGATCGGCTCGTGTACGCGCGG 300
DB 241 TCGAGACCCCGAGGTTCCAAATCGTCTGATCGGCTCGTGTACGCGCGG 300
QY 301 TCACCCGTTGGGTTTCATCGAGACCGCTACCGCAAGGTGGTCGACGGGTGGTCA 360
DB 301 TCACCCGTTGGGTTTCATCGAGACCGCTACCGCAAGGTGGTCGACGGGTGGTCA 360
QY 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTCGTGGCGAGGCCAACT 420
DB 361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCACGTCGTGGCGAGGCCAACT 420
QY 421 CGCGGATCGACGAAAGGCGGTTTCGGAGGCGCGGTGTGGTCCGCGGCGG 480
DB 421 CGCGGATCGACGAAAGGCGGTTTCGGAGGCGCGGTGTGGTCCGCGGCGG 480
QY 481 GCGAGTCCAGTACGTGCGCTTCGCGAGGTGGACTACATGGACNTKTCSCCGCGC 540
DB 481 GCGAGTCCAGTACGTGCGCTTCGCGAGGTGGACTACATGGAGTGTGCGCGCGC 540
QY 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACCCGTCGCC 600
DB 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACCCGTCGCC 600
QY 601 TGATGGCGCCAAATCGACGCGGCTTCGCTGTGGTGGCGAGCGCGCGCTGG 660
DB 601 TGATGGCGCCAAATCGACGCGGCTTCGCTGTGGTGGCGAGCGCGCGCTGG 660
QY 661 TGGGCAACCGCATGGAGCTGCGCGCGGATCGACGCGGCGAGT 705
DB 661 TGGGCAACCGCATGGAGCTGCGCGCGGATCGACGCGGCGAGT 705

RESULT 7

US-09-285-306-9
; Sequence 9, Application US/09285306A
; Publication No. US20020187467A1

; GENERAL INFORMATION:
; APPLICANT: Drenkew, Jorg
; APPLICANT: Drenkew, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700S
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 9

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; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-9

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 6.1e-150;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCCTCCGTCGTCGGGG 60
Db 1 CCCAGAGCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCCTCCGTCGTCGGGG 60
QY 61 CGATCAAGGAGTTCTTTCGGCCACCCAGCAGCTGTCCAGTTATGACACAGAACACCCGC 120
Db 61 CGATCAAGGAGTTCTTTCGGCCACCCAGCAGCTGTCCAGTTATGACACAGAACACCCGC 120
QY 121 TGTGGGCTCACCCACAAAGCGCCCTGTGCGGCTGCGGCGCTGGGCGGCTGTCTGCCGG 180
Db 121 TGTGGGCTCACCCACAAAGCGCCCTGTGCGGCTGCGGCGCTGGGCGGCTGTCTGCCGG 180
QY 181 AGCGGCGGGCTGGAGTCCGAGTCGCGAGCGTGCACCGTCCCACTACGCGCGGATGCCCCGA 240
Db 181 AGCGGCGGGCTGGAGTCCGAGTCGCGAGTCGCGAGTCGCGAGTCGCGCTCCCACTACGCGCGGATGCCCCGA 240
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGTGATCGGCTCGCTGTCGCTGTACCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGTGATCGGCTCGCTGTCGCTGTATCGCGGG 300
QY 301 TCACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGGTGCACGCGTGTCAACCG 360
Db 301 TCACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGGTGCACGCGTGTCAACCG 360
QY 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCCACGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCCACGTGGTGGCGAGGCCAACT 420
QY 421 CGCGATCGACGCAAGGGCCGGTTTCGCGAGGCGCCGCTGCTGTCGCGCGCAAGCGG 480
Db 421 CGCGATCGACGCAAGGGCCGGTTTCGCGAGGCGCCGCTGCTGTCGCGCGCAAGCGG 480
QY 481 GCGAGTTCGAGTACGTGCGCTCGTCGAGAGTGAGTACATGACACNTKTCSCGCGGCCARA 540
Db 481 GCGAGTTCGAGTACGTGCGCTCGTCGAGAGTGAGTACATGACACNTKTCSCGCGGCCARA 540
QY 541 TGGTTCGTTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCCCAACCGTGC 600
Db 541 TGGTTCGTTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCCCAACCGTGC 600
QY 601 TGATGGCGCCAAATGCAKCGCCAGCGGTTCCGCTGTCGCGAGCGGCGCGCTGG 660
Db 601 TGATGGCGCCAAATGCAKCGCCAGCGGTTCCGCTGTCGCGAGCGGCGCGCTGG 660
QY 661 TGGCACCGGATGGAGTGGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGCACCGGATGGAGTGGCGCGCGATCGACGCGGCGACGT 705

RESULT 8
US-09-285-306-12
; Sequence 12, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; CURRENT FILING DATE: 1998-04-02
; EARLIER APPLICATION NUMBER: US 60/080.616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-12

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 6.1e-150;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCCTCCGTCGTCGGGG 60
Db 1 CCCAGAGCTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCCTCCGTCGTCGGGG 60
QY 61 CGATCAAGGAGTTCTTTCGGCCACCCAGCAGCTGTCCAGTTATGACACAGAACACCCGC 120
Db 61 CGATCAAGGAGTTCTTTCGGCCACCCAGCAGCTGTCCAGTTATGACACAGAACACCCGC 120
QY 121 TGTGGGCTCACCCACAAAGCGCCCTGTGCGGCTGCGGCGCTGGGCGGCTGTCTGCCGG 180
Db 121 TGTGGGCTCACCCACAAAGCGCCCTGTGCGGCTGCGGCGCTGGGCGGCTGTCTGCCGG 180
QY 181 AGCGGCGGGCTGGAGTCCGAGTCGCGAGTCGACCGTCCCACTACGCGCGGATGCCCCGA 240
Db 181 AGCGGCGGGCTGGAGTCCGAGTCGCGAGTCGCGAGTCGCGAGTCGCGCTCCCACTACGCGCGGATGCCCCGA 240
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGTGATCGGCTCGCTGTCGCTGTACCGCGGG 300
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGTGATCGGCTCGCTGTCGCTGTATCGCGGG 300
QY 301 TCACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGGTGCACGCGTGTCAACCG 360
Db 301 TCACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGGTGCACGCGTGTCAACCG 360
QY 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCCACGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCCACGTGGTGGCGAGGCCAACT 420
QY 421 CGCGATCGACGCAAGGGCCGGTTTCGCGAGGCGCCGCTGCTGTCGCGCGCAAGCGG 480
Db 421 CGCGATCGACGCAAGGGCCGGTTTCGCGAGGCGCCGCTGCTGTCGCGCGCAAGCGG 480
QY 481 GCGAGTTCGAGTACGTGCGCTCGTCGAGAGTGAGTACATGACACNTKTCSCGCGGCCARA 540
Db 481 GCGAGTTCGAGTACGTGCGCTCGTCGAGAGTGAGTACATGACACNTKTCSCGCGGCCARA 540
QY 541 TGGTTCGTTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCCCAACCGTGC 600
Db 541 TGGTTCGTTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCCCAACCGTGC 600
QY 601 TGATGGCGCCAAATGCAKCGCCAGCGGTTCCGCTGTCGCGAGCGGCGCGCTGG 660
Db 601 TGATGGCGCCAAATGCAKCGCCAGCGGTTCCGCTGTCGCGAGCGGCGCGCTGG 660
QY 661 TGGCACCGGATGGAGTGGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGCACCGGATGGAGTGGCGCGCGATCGACGCGGCGACGT 705

RESULT 9
US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080.616
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; CURRENT FILING DATE: 1998-04-03
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 13
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-13

Query Match 98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 6.1e-150;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;
QY 1 CCAGAGCTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCCTCGCTGGCGG 60
DB 1 CCAGAGCTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCTGGCGG 60
QY 61 CGATCAAGAGTTCTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAAGAACACCGC 120
DB 61 CGATCAAGAGTTCTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAAGAACACCGC 120
QY 121 TGTTCGGGCTCACCAACAGCGCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCCGG 180
DB 121 TGTTCGGGCTCACCAACAGCGCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCCGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCAACCGCTCCACTACGCGCGGATGTGCCGA 240
DB 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCAACCGCTCCACTACGCGCGGATGTGCCGA 240
QY 241 TCAGACCCCGGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTCTCGGTGTACGCGCGG 300
DB 241 TCAGACCCCGGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTCTCGGTGTATGCGCGG 300
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCTGACCGAAGGTGTGTGCGGCGGTGTACCG 360
DB 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCTGACCGAAGGTGTGTGCGGCGGTGTACCG 360
QY 361 ACAGATCCACTACCTGACCGCGAGAGGACCGCCACGTCGTGGTGGCGAGGCCAACT 420
DB 361 ACAGATCCACTACCTGACCGCGAGAGGACCGCCACGTCGTGGTGGCGAGGCCAACT 420
QY 421 CGCGGATCGACGCGAAGGCGCGTTTCGCGAGGCGCGGTCGTGGTTCGCGCGAAGCGG 480
DB 421 CGCGGATCGACGACGAGGCGCGTTTCGCGAGGCGCGGTCGTGGTTCGCGCGAAGCGG 480
QY 481 GCAGGTTCGAGTACGTGCGCTCGTTCGAGGTGACTACATGGACNTKTSCTCCGCGCARA 540
DB 481 GCAGGTTCGAGTACGTGCGCTCGTTCGAGGTGACTACATGGACNTKTSCTCCGCGCARA 540
QY 541 TGTGTTCGTTGGCCACCGGATGATCCCGTTCTTCGAGCAGCAGCAGCCACCGTGCCC 600
DB 541 TGTGTTCGTTGGCCACCGGATGATCCCGTTCTTCGAGCAGCAGCAGCCACCGTGCCC 600
QY 601 TGATGGCGCCCAACATGCAKCGCAGCGGTTCCTGTGGTGGCGAGCGCGCGCTGG 660
DB 601 TGATGGCGCCCAACATGCAKCGCAGCGGTTCCTGTGGTGGCGAGCGCGCGCTGG 660
QY 661 TGGGCAACCGCATGGAGCTTGGCGCGCGGATTCAGCGCGGCGAGCT 705
DB 661 TGGGCAACCGCATGGAGCTTGGCGCGCGGATTCAGCGCGGCGAGCT 705

RESULT 10
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Ginteras, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14

Query Match 98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 6.1e-150;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;
QY 1 CCAGAGCTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCCTCGCTGGCGG 60
DB 1 CCAGAGCTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCTGGCGG 60
QY 61 CGATCAAGAGTTCTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAAGAACACCGC 120
DB 61 CGATCAAGAGTTCTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAAGAACACCGC 120
QY 121 TGTTCGGGCTCACCAACAGCGCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCCGG 180
DB 121 TGTTCGGGCTCACCAACAGCGCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCCGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCAACCGCTCCACTACGCGCGGATGTGCCGA 240
DB 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCAACCGCTCCACTACGCGCGGATGTGCCGA 240
QY 241 TCAGACCCCGGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTCTCGGTGTACGCGCGG 300
DB 241 TCAGACCCCGGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTCTCGGTGTATGCGCGG 300
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCTGACCGAAGGTGTGTGCGGCGGTGTACCG 360
DB 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCTGACCGAAGGTGTGTGCGGCGGTGTACCG 360
QY 361 ACAGATCCACTACCTGACCGCGAGAGGACCGCCACGTCGTGGTGGCGAGGCCAACT 420
DB 361 ACAGATCCACTACCTGACCGCGAGAGGACCGCCACGTCGTGGTGGCGAGGCCAACT 420
QY 421 CGCGGATCGACGCGAAGGCGCGTTTCGCGAGGCGCGGTCGTGGTTCGCGCGAAGCGG 480
DB 421 CGCGGATCGACGACGAGGCGCGTTTCGCGAGGCGCGGTCGTGGTTCGCGCGAAGCGG 480
QY 481 GCAGGTTCGAGTACGTGCGCTCGTTCGAGGTGACTACATGGACNTKTSCTCCGCGCARA 540
DB 481 GCAGGTTCGAGTACGTGCGCTCGTTCGAGGTGACTACATGGACNTKTSCTCCGCGCARA 540
QY 541 TGTGTTCGTTGGCCACCGGATGATCCCGTTCTTCGAGCAGCAGCAGCCACCGTGCCC 600
DB 541 TGTGTTCGTTGGCCACCGGATGATCCCGTTCTTCGAGCAGCAGCAGCCACCGTGCCC 600
QY 601 TGATGGCGCCCAACATGCAKCGCAGCGGTTCCTGTGGTGGCGAGCGCGCGCTGG 660
DB 601 TGATGGCGCCCAACATGCAKCGCAGCGGTTCCTGTGGTGGCGAGCGCGCGCTGG 660
QY 661 TGGGCAACCGCATGGAGCTTGGCGCGCGGATTCAGCGCGGCGAGCT 705
DB 661 TGGGCAACCGCATGGAGCTTGGCGCGCGGATTCAGCGCGGCGAGCT 705

RESULT 11
US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Ginteras, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences

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; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
;
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; US-09-285-306-16

```

Query Match	98.6%	Score 695	DB 9	Length 705
Best Local Similarity	99.6%	Pred. No. 6.1e-150		
Matches 695	Conservative 4	Mismatches 6	Indels 0	Gaps 0
QY	1	CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCCGTCTGTGGCGG	60	
Db	1	CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCCGTCTGTGGCGG	60	
QY	61	CGATCAAGGAGTCTTTCGGCACCAGCCAGGTGTCCCAAGTTCATGGACGAGAACCAACCCG	120	
Db	61	CGATCAAGGAGTCTTTCGGCACCAGCCAGGTGTCCCAAGTTCATGGACGAGAACCAACCCG	120	
QY	121	TGTGGGGCTCACGCCAACAGGCGCCTGTGCGCGCTGGGCGCCGGGTGTGTGTCGCCGG	180	
Db	121	TGTGCGGGCTCACGCCAACAGGCGCCTGTGCGCGCTGGGCGCCGGGTGTGTGTCGCCGG	180	
QY	181	AGCGGCGCGGCTGGAGTCCCGACGCTGCACCGTCCCACTAGGCGCGGATGTGCCGA	240	
Db	181	AGCGGCGCGGCTGGAGTCCCGACGCTGCACCGTCCCACTAGGCGCGGATGTGCCGA	240	
QY	241	TCGAGACCCCGGAGGTTCCCAACATCCGCTCTGATCGGCTCGCTGTCCGTTGTACGCGCGG	300	
Db	241	TCGAGACCCCGGAGGTTCCCAACATCCGCTCTGATCGGCTCGCTGTCCGTTGTACGCGCGG	300	
QY	301	TCNAACCGTTCGGGTTTCATCGAGAGCCGTACCGCAAGGTGGTCGACGGCGTGTACCG	360	
Db	301	TCNAACCGTTCGGGTTTCATCGAGAGCCGTACCGCAAGGTGGTCGACGGCGTGTACCG	360	
QY	361	ACGAGATCCACTACCTACCGCCGACGAGAGACCGCCACGTGGTGGCGGAGGCCAACT	420	
Db	361	ACGAGATCCACTACCTACCGCCGACGAGAGACCGCCACGTGGTGGCGGAGGCCAACT	420	
QY	421	CGCCGATCGACGCAAGGGCCGTTCCCGAGGCGCGGGTGTGGTCCGCGCAAGCGCG	480	
Db	421	CGCCGATCGACGCAAGGGCCGTTCCCGAGGCGCGGGTGTGGTCCGCGCAAGCGCG	480	
QY	481	GGAGGTCCAGTACGTGCCCTCGTCAGGTGGACTACATGGAGNTKTCSCCGGCCARA	540	
Db	481	GGAGGTCCAGTACGTGCCCTCGTCAGGTGGACTACATGGAGNTKTCSCCGGCCARA	540	
QY	541	TGCTGTCCGTGGCCACCGCATCATCCGTTCTCGAGACACGACGCGCAACCGGTGCC	600	
Db	541	TGCTGTCCGTGGCCACCGCATCATCCGTTCTCGAGACACGACGCGCAACCGGTGCC	600	
QY	601	TGATGGCGCCAAATGCAKCGCCAGGCGGTTCCGTTGGTTCGACGACGANGCCCGCTGG	660	
Db	601	TGATGGCGCCAAATGCAKCGCCAGGCGGTTCCGTTGGTTCGACGACGANGCCCGCTGG	660	
QY	661	TGGGACCGGCATGGAGCTGCGGCGCGCGCATCGACGGCGCAGT	705	
Db	661	TGGGACCGGCATGGAGCTGCGGCGCGCGCATCGACGGCGCAGT	705	

RESULT 12
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg

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; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

Query March          98.6%; Score 695; DB 9; Length 705;
Best local Similarity 98.6%; Pred. No. 6.1e-150;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGATCACCCGAGACCCCTGATCAACATCCGTCGCGTCCGTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACCCGAGACCCCTGATCAACATCCGTCGATCGTGGCGG 60

QY 61 CGATCAAGGAGTCTTTCGGCACCCAGCCAGCGTGTCCAGTTTCATGACCGAGAACCAACCCGC 120
Db 61 CGATCAAGGAGTCTTTCGGCACCCAGCCAGCGTGTCCAGTTTCATGACCGAGAACCAACCCGC 120

QY 121 TGTCCGGGCTCACCCACAAGCGCGGCTGTCGAGCGTGGCCGCGGTGTCGTCCCGGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCGGCTGTCGAGCGTGGCCGCGGTGTCGTCCCGGG 180

QY 181 AGCGGGCCGGGCTGGAGTCCGGAGCTGCAGCCGCTCCCACTACGGCCGGAATGTCGCCGA 240
Db 181 AGCGGGCCGGGCTGGAGTCCGGAGCTGCAGCCGCTCCCACTACGGCCGGAATGTCGCCGA 240

QY 241 TCAGAGACCCGGAGGCTCCCAACATCGTCTGATCGGCTCGCTGTGCGTGTACGCGCGGG 300
Db 241 TCAGAGACCCGGAGGCTCCCAACATCGTCTGATCGGCTCGCTGTGCGTGTATGCGCGGG 300

QY 301 TC AACCCGTTTCGGGTTTCATCGAGACGCCGTACCGCAAGTGTGTCAGCGCGGTGTCACCG 360
Db 301 TC AACCCGTTTCGGGTTTCATCGAGACGCCGTACCGCAAGTGTGTCAGCGCGGTGTCACCG 360

QY 361 ACAGATTCACCTATCTGACCGCGACGAGGAGACCGCCACGTGTGGCGAGGCCAACT 420
Db 361 ACAGATTCACCTATCTGACCGCGACGAGGAGACCGCCACGTGTGGCGAGGCCAACT 420

QY 421 CGCCGATCGACGCAAGGCGCGTTCGCGAGCGCCGGTGTGTCGCGCCGCAAGGCGG 480
Db 421 CGCCGATCGACGCAAGGCGCGTTCGCGAGCGCCGGTGTGTCGCGCCGCAAGGCGG 480

QY 481 GCGAGTTCGAGTACGTGCGCCTCGTCGAGGTGGAATACATGACNKTCTCCGCGGCCARA 540
Db 481 GCGAGTTCGAGTACGTGCGCCTCGTCGAGGTGGAATACATGACNKTCTCCGCGGCCARA 540

QY 541 TGTGTGCGTGGCCACCGGATGATCCCGTTCCTCGAGCACGACGCCACCGTGGCCC 600
Db 541 TGTGTGCGTGGCCACCGGATGATCCCGTTCCTCGAGCACGACGCCACCGTGGCCC 600

QY 601 TGATGGGCCCAACATGCACGCCAGCGGTTCCGCTGGTGGCGCAGCGANGCGCGCTGG 660
Db 601 TGATGGGCCCAACATGCACGCCAGCGGTTCCGCTGGTGGCGCAGCGANGCGCGCTGG 660

QY 661 TGGGCAACCGGCATGGAGCTGCGCGGCGGATCGACGCGCGACGT 705
Db 661 TGGGCAACCGGCATGGAGCTGCGCGGCGGATCGACGCGCGACGT 705

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RESULT 13
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:

Publication No. US20020187467A1
GENERAL INFORMATION:
APPLICANT: Gingeras, Thomas
APPLICANT: Drenkow, Jorg
TITLE OF INVENTION: Mycobacterial rpoB Sequences
FILE REFERENCE: 018547-018570US
CURRENT APPLICATION NUMBER: US/09/285,306A
CURRENT FILING DATE: 1999-04-02
EARLIER APPLICATION NUMBER: US 60/080,616
EARLIER FILING DATE: 1998-04-03
NUMBER OF SEQ ID NOS: 181
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 11
LENGTH: 705
TYPE: DNA
ORGANISM: Mycobacterium avium
FEATURE:
NAME/KEY: modified_base
LOCATION: (42)...(42)
OTHER INFORMATION: n = g,a,c or t
FEATURE:
NAME/KEY: modified_base
LOCATION: (692)...(692)
OTHER INFORMATION: n = g,a,c or t
US-09-285-306-11

Query Match 98.3%; Score 693; DB 9; Length 705;
Best Local Similarity 98.3%; Pred. No. 1.7e-149;
Matches 693; Conservative 4; Mismatches 8; Indels 0; Gaps 0;

QY 1 CCAGACGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCGCGTGGCGG 60
DB 1 CCAGACGCTGGAGGCGATCACACCGCAGACCCCTGATCAACNTCCGTCGCGTGGCGG 60
QY 61 CGATCAAGAGGTTCTTCGGCACCGACGAGTGTCCAGTTTCATGGACAGAACCCCG 120
DB 61 CGATCAAGAGGTTCTTCGGCACCGACGAGTGTCCAGTTTCATGGACAGAACCCCG 120
QY 121 TGTGGGGCTCACCAACAGCGCGCTGTGGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
DB 121 TGTGGGGCTCACCAACAGCGCGCTGTGGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
QY 181 AGCGGGCGGGCTGGAGGTCGCGAGTGCACCCGTCGCCACTACGGCCGATGTGCCGA 240
DB 181 AGCGGGCGGGCTGGAGGTCGCGAGTGCACCCGTCGCCACTACGGCCGATGTGCCGA 240
QY 241 TCAGAGACCCGAGGGTCCCAACATCGTGTGATCGCTCGTGTGGTGTACGCGCGG 300
DB 241 TCAGAGACCCGAGGGTCCCAACATCGTGTGATCGCTCGTGTGGTGTACGCGCGG 300
QY 301 TCACCCGTTTCGGGTTTCATCGAGACGCGCTACCGCAGGTGGTTCGACGGGTGTACCG 360
DB 301 TCACCCGTTTCGGGTTTCATCGAGACGCGCTACCGCAGGTGGTTCGACGGGTGTACCG 360
QY 361 ACAGATCCACTACTACCTGACCCGCGACGAGGAGGACCCCACTGGTGGCGAGGCCAACT 420
DB 361 ACAGATCCACTACTACCTGACCCGCGACGAGGAGGACCCCACTGGTGGCGAGGCCAACT 420
QY 421 CGCGGATCGACGCGAGGGCGGTTCCCGAGGCGCGGGTGTGGTTCGCGCAGGCGG 480
DB 421 CGCGGATCGACGCGAGGGCGGTTCCCGAGGCGCGGGTGTGGTTCGCGCAGGCGG 480
QY 481 GCGAGGTCGAGTACGTGCTCCCTCGTCCGAGGTGGACTACATGGANNTKTCSCCGGCCARA 540
DB 481 GCGAGGTCGAGTACGTGCTCCCTCGTCCGAGGTGGACTACATGGANNTKTCSCCGGCCARA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACCCAAACCGTCC 600
DB 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTTCGAGACGACGACCCAAACCGTCC 600
QY 601 TGATGGGCGCCAAACATGCAKCGCGGGTTCGCTGGTGGCAGCGGANGCGCGCTGG 660

APPLICANT: Gingeras, Thomas
APPLICANT: Drenkow, Jorg
TITLE OF INVENTION: Mycobacterial rpoB Sequences
FILE REFERENCE: 018547-018570US
CURRENT APPLICATION NUMBER: US/09/285,306A
CURRENT FILING DATE: 1999-04-02
EARLIER APPLICATION NUMBER: US 60/080,616
EARLIER FILING DATE: 1998-04-03
NUMBER OF SEQ ID NOS: 181
SOFTWARE: FastSeq for Windows Version 3.0
SEQ ID NO 24
LENGTH: 705
TYPE: DNA
ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match 98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 6.1e-150;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCAGACGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCGCGTGGCGG 60
DB 1 CCAGACGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCGCGTGGCGG 60
QY 61 CGATCAAGAGGTTCTTCGGCACCGACGAGTGTCCAGTTTCATGGACAGAACCCCG 120
DB 61 CGATCAAGAGGTTCTTCGGCACCGACGAGTGTCCAGTTTCATGGACAGAACCCCG 120
QY 121 TGTGGGGCTCACCAACAGCGCGCTGTGGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
DB 121 TGTGGGGCTCACCAACAGCGCGCTGTGGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
QY 181 AGCGGGCGGGCTGGAGGTCGCGAGTGCACCCGTCGCCACTACGGCCGATGTGCCGA 240
DB 181 AGCGGGCGGGCTGGAGGTCGCGAGTGCACCCGTCGCCACTACGGCCGATGTGCCGA 240
QY 241 TCAGAGACCCGAGGGTCCCAACATCGTGTGATCGCTCGTGTGGTGTACGCGCGG 300
DB 241 TCAGAGACCCGAGGGTCCCAACATCGTGTGATCGCTCGTGTGGTGTACGCGCGG 300
QY 301 TCACCCGTTTCGGGTTTCATCGAGACGCGCTACCGCAGGTGGTTCGACGGGTGTACCG 360
DB 301 TCACCCGTTTCGGGTTTCATCGAGACGCGCTACCGCAGGTGGTTCGACGGGTGTACCG 360
QY 361 ACAGATCCACTACTACCTGACCCGCGACGAGGAGGACCCCACTGGTGGCGAGGCCAACT 420
DB 361 ACAGATCCACTACTACCTGACCCGCGACGAGGAGGACCCCACTGGTGGCGAGGCCAACT 420
QY 421 CGCGGATCGACGCGAGGGCGGTTCCCGAGGCGCGGGTGTGGTTCGCGCAGGCGG 480
DB 421 CGCGGATCGACGCGAGGGCGGTTCCCGAGGCGCGGGTGTGGTTCGCGCAGGCGG 480
QY 481 GCGAGGTCGAGTACGTGCTCCCTCGTCCGAGGTGGACTACATGGANNTKTCSCCGGCCARA 540
DB 481 GCGAGGTCGAGTACGTGCTCCCTCGTCCGAGGTGGACTACATGGANNTKTCSCCGGCCARA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACCCAAACCGTCC 600
DB 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTTCGAGACGACGACCCAAACCGTCC 600
QY 601 TGATGGGCGCCAAACATGCAKCGCGGGTTCGCTGGTGGCAGCGGANGCGCGCTGG 660
DB 601 TGATGGGCGCCAAACATGCAKCGCGGGTTCGCTGGTGGCAGCGGANGCGCGCTGG 660
QY 661 TGGGACCGGATGAGCTGCGCGCGCGATTCGACGCGCGGACGT 705
DB 661 TGGGACCGGATGAGCTGCGCGCGCGATTCGACGCGCGGACGT 705

RESULT 14
US-09-285-306-11
; Sequence 11, Application US/09285306A

Db 601 TGATGGGCGCCAAACATGCAGCCAGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660
QY 661 TGGGCACCGGATGAGCTGCGCGGGCGATGACGCGCGAGCT 705
Db 661 TGGGCACCGGATGAGCTGCGCGGGGATGACGCGCGAGCT 705
RESULT 15
US-09-285-306-10
; Sequence 10, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-10

Query Match 96.9%; Score 683; DB 9; Length 705;
Best Local Similarity 96.9%; Pred. No. 3.4e-147;
Matches 683; Conservative 10; Mismatches 12; Indels 0; Gaps 0;
QY 1 CCCAGGAGCTGGAGCGATCACCGGAGACCCCTGATCAATCCGTCCCGTCCGTGGCGG 60
Db 1 CCCAGGAGCTGGAGCGATCACCGGAGACCCCTGATCAATCCGTCCGTGGCGG 60
QY 61 CGATCAAGGAGTCTTGGGACACGAGCGAGTGTCCAGTTCATGGACCAAGACCCCGC 120
Db 61 CGATCAAGGAGTCTTGGGACACGAGCGAGTGTCCAGTTCATGGACCAAGACCCCGC 120
QY 121 TGTCCGGGCTCACCACAAAGCGCGCTGTGGGCGCTGGGCGCGGTGTGTCCCGGG 180
Db 121 TGTCCGGGCTCACCACAAAGCGCGCTGTGGGCGCTGGGCGCGGTGTGTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGTCCGAGCTGCACCGTCCCACTAGCGCGGATGTGCCGA 240
Db 181 AGCGGCGCGGCTGGAGTCCGAGCTGCACCGTCCCACTAGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGGAGGTCCCAACATCGTCTGATCGGCTCGCTCGGTGTACGGCGGG 300
Db 241 TCGAGACCCCGGAGGTCCCAACATCGTCTGATCGGCTCGCTCGGTGTACGGCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCAGAGTGTGTGCGCGGTGTACCG 360
Db 301 TSAACCCGTTCCGGTTTCATCGAGACCCGTTACCGAGGTGTGTGCGGTGTACCG 360
QY 361 ACGAGATCCACTACTACCGCCGACGAGGAGACCGCCAGCTGGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACTACCGCCGACGAGGAGACCGCCAGCTGGTGGCGAGGCCAACT 420
QY 421 CGCGGATCGAGCGCAAGGCGGTTCCGCGAGCGCGGTGTGTGCGCGGAGGCGG 480
Db 421 CGCGGATCGAGCAAGGCGCGGTTCCGAGGAGKCCCGGTTGTGTGCGCGSAGGCGG 480
QY 481 GCGAGGTGAGTACGTGCCCTCTGTCGAGTGGACTACATGACNTKTCSCCGGCCARA 540
Db 481 GCGAGGTGAGTACGTGCCCTCTGTCGAGTGGACTACATGAGTGTGCGCGGCCAGA 540
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGACGCCAACCGTGCCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGACGCCAACCGTGCCC 600

QY 601 TGATGGGCGCCAAACATGCAGCCAGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660
Db 601 TGATGGGCGCCAAACATGCAGCCAGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660
QY 661 TGGGCACCGGATGAGCTGCGCGGGGATGACGCGCGAGCT 705
Db 661 TGGGCACCGGATGAGCTGCGCGGGGATGACGCGCGAGCT 705

Search completed: August 20, 2004, 01:36:35
Job time : 408.972 secs

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OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 12:36:51 ; Search time 66.4446 Seconds
(without alignments)
5888.223 Million cell updates/sec

Title: US-09-285-306-4

Perfect score: 705

Sequence:

1 ccagagctggagcgatc.....ggcgatcgagcgagcgt 705

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents_NA.*
1: /cgn2_6/ptodata/2/ina/5A_COMB.seq.*
2: /cgn2_6/ptodata/2/ina/5B_COMB.seq.*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seq.*
4: /cgn2_6/ptodata/2/ina/6B_COMB.seq.*
5: /cgn2_6/ptodata/2/ina/PTUS_COMB.seq.*
6: /cgn2_6/ptodata/2/ina/backfiles1.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	86.5	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	3	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	4	US-08-520-946-138
11	530.4	75.2	620	4	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-08-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	4	US-08-520-946-136
19	528.8	75.0	620	4	US-08-520-946-137
20	528.8	75.0	620	4	US-08-520-946-139
21	528.8	75.0	620	4	US-08-520-946-140
22	528.8	75.0	620	4	US-09-655-378A-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	371.2	52.7	4074	4	US-09-252-991A-4737

28	371.2	52.7	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
29	337.2	47.8	4083	4	US-09-489-039A-22	Sequence 22, Appl
30	337.2	47.8	4206	4	US-09-489-039A-30	Sequence 30, Appl
31	293.4	41.6	432	2	US-08-313-185-59	Sequence 59, Appl
32	293.4	41.6	432	3	US-09-082-614A-59	Sequence 59, Appl
33	286.2	40.6	324	4	US-08-750-088A-36	Sequence 36, Appl
34	286.2	40.6	324	4	US-09-722-319-36	Sequence 36, Appl
35	265.2	37.6	2964	4	US-09-540-236-1097	Sequence 1097, Ap
36	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
37	265.2	37.6	31063	4	US-09-596-002-20	Sequence 20, Appl
38	255.6	36.3	319	4	US-08-750-088A-35	Sequence 35, Appl
39	255.6	36.3	319	4	US-09-722-319-35	Sequence 35, Appl
40	249.8	35.4	11935	4	US-09-634-238-401	Sequence 401, App
41	244.4	34.7	14672	4	US-08-961-527-111	Sequence 111, App
42	244.4	34.7	1830121	4	US-09-557-884-1	Sequence 1, Appli
43	244.4	34.7	1830121	4	US-09-643-990A-1	Sequence 1, Appli
44	241.2	34.2	4143	4	US-09-328-352-4006	Sequence 4006, Ap
45	226.4	32.1	329	4	US-08-750-088A-34	Sequence 34, Appl

ALIGNMENTS

RESULT 1

US-08-797-812-24
; Sequence 24, Application US/08797812
; Patent No. 6228575
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas A.
; APPLICANT: Mack, David
; APPLICANT: Chee, Mark S.
; APPLICANT: Berno, Anthony J.
; APPLICANT: Stryer, Lubert
; APPLICANT: Ghandour, Ghassan
; APPLICANT: Wang, Ching
; TITLE OF INVENTION: Chip-Based Species Identification and
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/797,812
; FILING DATE: 07-FEB-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/017,765
; FILING DATE: 15-MAY-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/629,031
; FILING DATE: 08-APR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/012,631
; FILING DATE: 01-MAR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/011,339
; FILING DATE: 08-FEB-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Fitts, Renee A.
; REGISTRATION NUMBER: 35,136
; REFERENCE/DOCKET NUMBER: 16528X-018550
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-326-2400
; TELEFAX: 415-326-2422

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; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 2
; LENGTH: 4403765
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; FEATURE:
; OTHER INFORMATION: CDC 1551
; OTHER INFORMATION: "n" bases at various positions throughout the sequence
; OTHER INFORMATION: represent a, t, c or g
;
US-09-103-840A-2

Query Match      85.5%; Score 603; DB 3; Length 4403765;
Best Local Similarity 91.4%; Pred. No. 3.9e-110; Indels 0; Gaps 0;
Matches 639; Conservative 0; Mismatches 60;

QY 1 CCCAGGAGCTGGAGGCGATCACACCGACAGCCCTGATCAACATCCGTCAGTGGCGG 60
Db 762963 CCCAGGAGCTGGAGGCGATCACACCGACAGCTTGATCAACATCCGTCAGTGGCGG 60
QY 61 CGATCAAGAGGTTCTTGGGACCGAGCGTGTCCAGTTCCTGATTCATGGACCAACACCCG 120
Db 763023 CGATCAAGAGGTTCTTGGGACCGAGCGTGTAGCCAAATTCATGGACCAACACCCG 763082
QY 121 TGTCCGGGCTCACCAACAGCGCCGCTGTCCGGGCTGGGCGCGGTGTCTGTCCCGG 180
Db 763083 TGTCCGGGCTCACCAACAGCGCCGCTGTCCGGGCTGGGCGCGGTGTCTGTCCCGG 763142
QY 181 AGCGGCGCGGCTGGAGGTCGGGACGTCGACCCGTCCTCCACTACGGCCGATGTGCCCGA 240
Db 763143 AGCGGCGCGGCTGGAGGTCGGGACGTCGACCCGTCCTCCACTACGGCCGATGTGCCCGA 763202
QY 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTCGGTGTATCGCGGG 300
Db 763203 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTCGGTGTATCGCGGG 763262
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGGGTGTGTACCG 360
Db 763263 TCAACCCGTTCCGGTTTCATCGAAACGCCGTACCGCAAGGTGGTGTGTACCG 763322
QY 361 ACAGATCCACTACCTGACCGCGGACGAGGAGGACCGCCACGTGTGGCGGAGCCCACT 420
Db 763323 ACAGATCCGTTACCTGACCGCGGACGAGGAGGACCGCCACGTGTGGTGCAAGCCCACT 763382
QY 421 CGCCGATCCACACAGGCGCGGTTTCGGGAGGCGCGGTTCTGTCGCGCGCGCCAGCGG 480
Db 763383 CGCCGATCCATCGGACGCGTCTTCTGTCGACCGCGGCTGTGTCTCGCCCGCAAGCGG 763442
QY 481 GCAGGTTCAGTACGTGCGCTCTCGTCGAGGTCGATCTAATGACGTGTGTGGCGCGCCAGA 540
Db 763443 GCAGGTTCAGTACGTGCGCTCTCGTCGAGGTCGATCTAATGACGTGTGTGGCGCGCCAGA 763502
QY 541 TGTGTTCGTTGGCCACCGGATGATCCGTTCTCGACGACGACGACGACCGCCAGCGTGGCC 600
Db 763503 TGTGTTCGTTGGCCACCGGATGATTCCTTCTCGAGCACGACGACGACCGCGCGTGGCC 763562
QY 601 TGATGGCGCCAAATGACGAGCGCCAGCGGCTTCCGCTGTGTGCGACGAGCGCGCTGTGG 660
Db 763563 TGATGGCGCCAAATGACGAGCGCCAGCGGCTTCCGCTGTGTGCGAGCGCGCTGTGG 763622
QY 661 TGGGCAACCGGATGGAGCTGGCGGCGCGATCGAGCGG 699
Db 763623 TGGGCAACCGGATGGAGCTGGCGGCGCGATCGAGCGG 763661

RESULT 3
US-09-103-840A-1
; Sequence 1, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:

; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 706 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
;
US-08-797-812-24

Query Match      86.6%; Score 610.6; DB 3; Length 706;
Best Local Similarity 91.6%; Pred. No. 8.1e-112; Indels 0; Gaps 0;
Matches 646; Conservative 0; Mismatches 59;

QY 1 CCCAGGAGCTGGAGGCGATCACACCGACAGCCCTGATCAACATCCGTCAGTGGCGG 60
Db 2 CCCAGGAGCTGGAGGCGATCACACCGACAGCTTGATCAACATCCGTCAGTGGCGG 61
QY 61 CGATCAAGAGGTTCTTGGGACCGAGCGTGTCCAGTTCATGGACCAACACCCG 120
Db 62 CGATCAAGAGGTTCTTGGGACCGAGCGTGTAGCCAAATTCATGGACCAACACCCG 121
QY 121 TGTCCGGGCTCACCCACAGCGCCGCTGTCCGGGCTGGGCGCGGTGTCTGTCCCGG 180
Db 122 TGTCCGGGCTTGACCCACAGCGCGCTGTCCGGGCTGGGCGCGGTGTCTGTCCAGTG 181
QY 181 AGCGGCGCGGCTGGAGGTCGGGACGTCGACCCGTCCTCCACTACGGCCGATGTGCCCGA 240
Db 182 AGCGTGGCGGCTGGAGGTCGGGACGTCGACCCGTCCTCCACTACGGCCGATGTGCCCGA 241
QY 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGTGGTGTATCGCGGG 300
Db 242 TCGAAACCCCTGAGGCGCCAAATCGGTCTGATCGGCTCGCTGTGGTGTATCGCGGG 301
QY 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGCAAGGTGGTTCGACGGGTGTGTACCG 360
Db 302 TCAACCCGTTCCGGTTTCATCGAAACGCCGTACCGCAAGGTGGTTCGACGGGTGTGTAGCG 361
QY 361 ACAGATCCACTACCTGACCGCGGACGAGGAGGACCGCCACGTGTGGTGCGCAGGCCAACT 420
Db 362 ACAGATCCGTTACCTGACCGCGGACGAGGAGGACCGCCACGTGTGGTGCAAGGCCAACT 421
QY 421 CGCCGATCCACACAGGCGCGGTTTCGGGAGGCGCGGTTCTGTCGCGCGCGCAAGCGG 480
Db 422 CGCCGATCCATCGGACGCTGCTTCTGTCGACCGCGGCTGTGTGTTCGCGCGCAAGCGG 481
QY 481 GCAGGTTCAGTACGTGCGCTCTCGTCGAGGTCGATCTAATGACGTGTGTGGCGCGCCAGA 540
Db 482 GCAGGTTCAGTACGTGCGCTCTCGTCGAGGTCGATCTAATGACGTGTGTGGCGCGCCAGA 541
QY 541 TGTGTTCGTTGGCCACCGGATGATCCGTTCTCGACGACGACGACGACCGCCAGCGTGGCC 600
Db 542 TGTGTTCGTTGGCCACCGGATGATTCCTTCTGAGCACGACGACGACCGCCAGCGTGGCC 601
QY 601 TGATGGCGCCAAATGACGAGCGCCAGCGGTTCCGCTGTGTGCGACGAGCGCGCTGTGG 660
Db 602 TCATGGGGCAACATGACGAGCGCGGTGCGCTGTGTCGTAGCAGGCGCGCGCTGTGG 661
QY 661 TGGGCAACCGGATGGAGCTGGCGGCGCGATCGAGCGGCGACGT 705
Db 662 TGGGCAACCGGATGGAGCTGGCGGCGCGATCGAGCGGCGACGT 706

RESULT 2
US-09-103-840A-2
; Sequence 2, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM

```

:	APPLICANT:	FLEISCHMAN, Robert D.			
:	APPLICANT:	WHITE, Owen R.			
:	APPLICANT:	FRASER, Claire M.			
:	APPLICANT:	VENTER, John C.			
:	TITLE OF INVENTION:	DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM			
:	TITLE OF INVENTION:	TUBERCULOSIS			
:	FILE REFERENCE:	24366-20007.00			
:	CURRENT APPLICATION NUMBER:	US/09/103,840A			
:	CURRENT FILING DATE:	1998-06-24			
:	NUMBER OF SEQ ID NOS:	2			
:	SOFTWARE:	PatentIn Ver. 2.1			
:	SEQ ID NO 1				
:	LENGTH:	4411529			
:	TYPE:	DNA			
:	ORGANISM:	Mycobacterium tuberculosis			
:	OTHER INFORMATION:	H37Rv			
US-09-103-840A-1					
	Query Match	85.5%;	Score 603;	DB 3;	Length 4411529;
	Best Local Similarity	91.4%;	Pred No. 3.9e-110;		
	Matches 639;	Conservative 0;	Mismatches 60;	Indels 0;	Gaps 0;
QY	1	CCCAGGACGTGGAGCGCATCACCCGACAGACCCTCATCAACAATCCGTCAGTCTGGCGG	60		
Dd	761003	CCCAGGACGTGGAGCGCATCACCCGACAGATTGATCAACATCCGCCGGTGTCGCG	761062		
QY	61	CGATCAGGAGTTCTTCGGCACCCAGCCAGCTGTCCAGTTCATGACACAGAACACCCGC	120		
Dd	761063	CGATCAGGAGTTCTTCGGCACCCAGCCAGCTAGCCAATTCATGGACCAACAACCCGC	761122		
QY	121	TGTCGGGGCTCACCCACAAGCCGCGCTGTGCGCGCTGGCGCCCGGTGTCTGTCCCCGG	180		
Dd	761123	TGTCGGGGTTGAACCCACAAGCCGCGACTGTGCGCGCTGGGGCCGGTCTGTCACTG	761182		
QY	181	AGCGGGCGGGCTGAGAGTTCGGACAGTGACCCGTCGCCACTACGGCCGAGTGTCCCGA	240		
Dd	761183	AGCGTGGCGGCTGGAGTCCGGACAGTGACCCGTCGCACTACGCGCGGATGTCCCGA	761242		
QY	241	TCGAGACCCCGGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTGTCTGTCTGTCTGT	300		
Dd	761243	TCGAAACCCCTGAGGGCCCAACATCGGTCTGTATCGGCTCGCTGTCTGTCTGTCTGT	761302		
QY	301	TCAAACCGTTCGGGTTTCATCGAGACGCGGTACCCGAAAGTGGTGCACGCGGTGTGTA	360		
Dd	761303	TCAAACCGGTTGGGTTTCATCGAAACGCGGTACCCGAAAGTGGTGCACGCGGTGTGTA	761362		
QY	361	ACGAGATCCACTACTCTGACGCCACAGGAGGACCGCCAGTGTGTGGCGCAGGCCAACT	420		
Dd	761363	ACGAGATCGTGTACTCTGACGCCACAGGAGGACCGCCAGTGTGTGGCGCAGGCCAACT	761422		
QY	421	CGCCGATTCGACGACAAGGGCCGGTTCGCGGAGGGCCCGGGTCTGTCTCGCCGCAAGGGG	480		
Dd	761423	CGCCGATTCGATCGGACGGTTCGTCGAGACCGCGCTGTCTGTCTCGCCGCAAGGGG	761482		
QY	481	GCAGGTTCGAGTAGTTCGTCCTCTGCGAGTGGACTACATGGACGTGTGCGCGCGCCAGA	540		
Dd	761483	GCAGGTTCGAGTAGTTCGTCCTCTGAGSTGGACTACATGGAGTCTCTGCGCCCGCCAGA	761542		
QY	541	TGTTGTCTGGTGGCCACCGCGATGATCCGTTTCCTTCGAGCAGCAGCGCCAAACCGTCCC	600		
Dd	761543	TGTTGTCTGGTGGCCACCGCGATGATCCCTTCCTTCGAGCAGCAGCGCCAAACCGTCCC	761602		
QY	601	TGATGGCGCCAACTACGACGCCGAGCGGTTCCGCTGGTTCGCGAGCGAGGCGCGGTGG	660		
Dd	761603	TCATGGGGGCAAACTACGACGCCGAGCGGTTCGCTGGTTCGCTAGCAGGCCCCCGTGG	761662		
QY	661	TGGGCACCGGCATGGAGCTCGCGCGCGGATCGACGGG	699		
Dd	761663	TGGGCACCGGCATGGAGCTCGCGCGCGGATCGACGGG	761701		

RESULT 4
US-08-313-185-57

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; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Bodmer, Thomas
; APPLICANT: Telenti, Amalio
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-313-185-57

Query Match 79.2%; Score 558.2; DB 2; Length 3447;
Best Local Similarity 87.4%; Pred.No.1.7e-101;
Matches 61; Conservative 0; Mismatches 88; Indels 0;

QY 1 CCCAGGACGTGGAGGCGGATCACACCGCAGACCCCTGATCAACATCGTCCAGTC
Db 1124 CCCAGGACGTGAGGCGGATCACGCGCAGACGCTGATCAATATCGTCCGGTGG
QY 61 CGATCAAGGAGTCTTTCGGCACCGACGAGTGTCCCAGTTCATGACACGAGAAC
Db 1184 CTATCAGGAATCTTTCGGCACCGACGAGTGTCCGAGTTCATGGATCAGAAC
QY 121 TGTGCGGGCTCACCCACAAAGCGCGCTGTGCGGCTGTGGGCCCGGAGTGGTCTG
Db 1244 TGTGCGGGCTTGACCCACAAAGCGCGCTGTGCGGCTGTGGGCCCGGAGTGGT
QY 181 AGCGGCGCGGGCTGGAGGTCCGCGACGTGCACCCGTCCTCCACTACGCGCGGATG
Db 1304 AGCGTCCGGGCTAGAGTCCGTGACGTGCACCCCTTCGACTACGGCCGGATG
QY 241 TCAGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTCCGTGTGAT
Db 1364 TCAGAGACTCGGAGGGCCCGAACATAGGTCGTGATCGGTCATTGTCGGTGTAC
QY 301 TCAAACCGGTCGGGTTTCATCGAGACGCCGTCACCGAAGGTGGTCAGCGCGTGG
Db 1424 TCAAACCCCTTCGGGTTTCATCGAAACACCGTACCGCAAGTGGTTGACGGTGTG

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Db	701	ACGAGATCGTGACCTGACCGCCGACGAGGAGGACCGCCACGTGTGGCAGAGGCCAATT	760
Qy	421	CGCCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCGGTGCTGTCCGCGCCGACAGGCGG	480
Db	761	CGCCGATCGATCGGACGCGTTCGTCGAGCGCGGTGCTGTCCGCGCCGACAGGCGG	820
Qy	481	CGGAGGTGAGTACGTGCGCTTCGTCGAGGTGGACTACATGACGTGTCCGCGCCGACAG	540
Db	821	CGGAGGTGAGTACGTGCGCTTCGTCGAGGTGGACTACATGACGTGTCCGCGCCGACAG	880
Qy	541	TGCTGTGCGTGCACCGGATGATCCGTTCTCGAGCAGCAGCAGCAGCAGCAGCAGCAGC	600
Db	881	TGCTGTGCGTGCACCGGATGATCCGTTCTCGAGCAGCAGCAGCAGCAGCAGCAGCAGC	940
Qy	601	TGATGGGCGCCAAACATGACGCGCCAGGCGG	630
Db	941	TCATGGGCGCCAAACATGACGCGCCAGGCGG	970
RESULT 8			
US-08-757-653-135			
; Sequence 135, Application US/08757653			
; Patent No. 5843669			
; GENERAL INFORMATION:			
; APPLICANT: Kaiser, Michael W.			
; APPLICANT: Lyamichev, Victor I.			
; APPLICANT: Lyamichev, Natasha			
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using			
; TITLE OF INVENTION: Thermostable PEN-1 Endonucleases			
; NUMBER OF SEQUENCES: 190			
; CORRESPONDENCE ADDRESS:			
; ADDRESSEE: Medlen & Carroll, LLP			
; STREET: 220 Montgomery Street, Suite 2200			
; CITY: San Francisco			
; STATE: California			
; COUNTRY: United States Of America			
; ZIP: 94104			
; COMPUTER READABLE FORM:			
; MEDIUM TYPE: Floppy disk			
; COMPUTER: IBM PC compatible			
; OPERATING SYSTEM: PC-DOS/MS-DOS			
; SOFTWARE: Patent In Release #1.0, Version #1.30			
; CURRENT APPLICATION DATA:			
; APPLICATION NUMBER: US/08/757,653			
; FILING DATE:			
; CLASSIFICATION: 435			
; ATTORNEY/AGENT INFORMATION:			
; NAME: Ingolia, Diane E.			
; REGISTRATION NUMBER: 40,027			
; REFERENCE/DOCKET NUMBER: FORS-02565			
; TELECOMMUNICATION INFORMATION:			
; TELEPHONE: (415) 705-8410			
; TELEFAX: (415) 397-8338			
; INFORMATION FOR SEQ ID NO: 135:			
; SEQUENCE CHARACTERISTICS:			
; LENGTH: 620 base pairs			
; TYPE: nucleic acid			
; STRANDEDNESS: double			
; TOPOLOGY: linear			
; MOLECULE TYPE: DNA (genomic)			
US-08-757-653-135			
Query Match			
Best Local Similarity 91.0%; Pred. No. 4.6e-96;			
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;			
Qy	36	ATCAACATCGTCCAGTCGTCGGCGGATCAAGAGTTCTTCGGCACCAGCCAGCTGTCC	95
Db	1	ATCAACATCGTCGGCGGTGTCGCCGATCAAGAGTTCTTCGGCACCAGCCAGCTGAGC	60
Qy	96	CAGTTATGACACCAACAAACCCGCTGTCTGGGGTTCAACCAAGCCGCGCTGTCTGGCG	155
Db	61	CAATTATGACACCAACAAACCCGCTGTCTGGGGTTGACCCACCAAGCCGCGCTGTCTGGCG	120

SEQUENCE CHARACTERISTICS:
 LENGTH: 620 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 US-08-757-653-138

Query Match 75.2%; Score 530.4; DB 2; Length 620;
 Best Local Similarity 91.0%; Pred. No. 4.6e-96;
 Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAATCCGTCAGTCGTCGGCGGATCAAGAGTTCCTCGCACAGCCAGCTGTCC 95
 Db 620 ATCAATCCGTCAGTCGTCGGCGGATCAAGAGTTCCTCGCACAGCCAGCTGTAGC 561

QY 96 CAGTTCATGACAGCAACACCCGCTGTCCGGGCTCAACCAAGCGCGCTGTCCGGC 155
 Db 560 CAATTCATGACAGCAACACCCGCTGTCCGGGCTCAACCAAGCGCGCTGTCCGGC 501

QY 156 CTGGGCGCGGTGTCTGTCCGGGAGCGCGGCTGGAGTCCGCGAGCTGTCCAGCG 215
 Db 500 CTGGGCGCGGTGTCTGTCCGGGAGCGCGGCTGGAGTCCGCGAGCTGTCCAGCG 441

QY 216 TCCCACTACGCGCGGATGTCCCGATCGAGACCCCGGAGGTCCCAACATCGGTCTGATC 275
 Db 440 TCGCACTACGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381

QY 276 GGCTCGCTGTCTGTATCGCGGCTCAACCGGTTCCGGGTTCAATCGAGCCCGTACCGC 335
 Db 380 GGCTCGCTGTCTGTATCGCGGCTCAACCGGTTCCGGGTTCAATCGAAACCGCTACCGC 321

QY 336 AAGTGTGTGACGCGGTGTCTGTCACGACGAGATCCACTACCTGACCGCGAGAGGAC 395
 Db 320 AAGTGTGTGACGCGGTGTGAGCGAGATCGTGTACCTGACCGCGAGAGGAC 261

QY 396 CGCCAGCGTGTGGCGAGCCCACTCGCGGATCGACGACAAAGGGCGGTTCCGCGAGGCC 455
 Db 260 CGCCAGCGTGTGGCGAGCCCACTCGCGGATCGATCGGAGCGGTCTGTCGAGCGC 201

QY 456 CGGTGTGTGTCCGCGGAGCGCGGAGTGTGAGTACGTGTCCTGTCCGAGGTGAC 515
 Db 200 CGGTGTGTGTCCGCGGAGCGCGGAGTGTGAGTACGTGTCCTGTGAGGTGAC 141

QY 516 TACATGACGTGTCCGCGCGGATGTGTCGCGTGGCGACCGGATGATCCGCTTCTC 575
 Db 140 TACATGACGTGTCCGCGCGGATGTGTCGCGTGGCGACCGGATGATCCGCTTCTC 81

QY 576 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 635
 Db 80 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 21

QY 636 CTGGTGGCGAGCGAGCGCC 655
 Db 20 CTGGTGGCGAGCGAGCGCC 1

RESULT 10
 US-08-520-946-135
 Sequence 135, Application US/08520946
 Patent No. 6372424
 GENERAL INFORMATION:
 APPLICANT: BROW, MARY ANN D.
 APPLICANT: LYAMICHEV, VICTOR I.
 APPLICANT: OLIVE, DAVID M.
 TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
 TITLE OF INVENTION: PATHOGENS
 NUMBER OF SEQUENCES: 160
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: MEDLEN & CARROLL
 STREET: 220 MONTGOMERY STREET, SUITE 2200
 CITY: SAN FRANCISCO
 STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/520,946
 FILING DATE:
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: CARROLL, PETER G.
 REGISTRATION NUMBER: 32,837
 REFERENCE/DOCKET NUMBER: FORS-01756
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 135:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 620 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: double
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 US-08-520-946-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;
 Best Local Similarity 91.0%; Pred. No. 4.6e-96;
 Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAATCCGTCAGTCGTCGGCGGATCAAGAGTTCCTCGCACAGCCAGCTGTCC 95
 Db 1 ATCAATCCGTCAGTCGTCGGCGGATCAAGAGTTCCTCGCACAGCCAGCTGTAGC 60

QY 96 CAGTTCATGACAGCAACACCCGCTGTCCGGGCTCAACCAAGCGCGCTGTCCGGC 155
 Db 61 CAATTCATGACAGCAACACCCGCTGTCCGGGCTCAACCAAGCGCGCTGTCCGGC 120

QY 156 CTGGGCGCGGTGTCTGTCCGGGAGCGCGGCTGGAGTCCGCGAGCTGCACCGC 215
 Db 121 CTGGGCGCGGTGTCTGTCCGGGAGCGCGGCTGGAGTCCGCGAGCTGCACCGC 180

QY 216 TCCCACTACGCGCGGATGTGTCGCGATCGAGACCCCGGAGGTCCCAACATCGGTCTGATC 275
 Db 181 TCGCACTACGCGCGGATGTGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

QY 276 GGCTCGCTGTCTGTATCGCGGTCACCGGTCAACCGTTCCGGTTTCATCGAGACCGCTACCGC 335
 Db 241 GGCTCGCTGTCTGTATCGCGGTCACCGGTCAACCGTTCCGGTTTCATCGAGACCGCTACCGC 300

QY 336 AAGTGTGTGACGCGGTGTCTGTCACGACGAGATCCACTACCTGACCGCGCGAGGAGGAC 395
 Db 301 AAGTGTGTGACGCGGTGTGTTAGCGAGAGATCGTGTACTGACCGCGCGAGGAGGAC 360

QY 396 CGCCAGCTGTGGCGAGGCCAACTCCCGATCGAGCAAGGGCCGGTTTCGCGAGGCC 455
 Db 361 CGCCAGCTGTGGCGAGGCCAACTCCCGATCGATCGAGCGGTCTGTCGAGCGC 420

QY 456 CGGTGTCTGTCTCGCGCGAGGGCGGAGTGTGAGTACGTGTCCTGTCCGAGGTGAC 515
 Db 421 CGGTGTCTGTCTCGCGCGAGGGCGGAGTGTGAGTACGTGTCCTGTCTGAGGTGAC 480

QY 516 TACATGACGTGTCTCGCGCGGATGTGTCGCGTGGCGACCGGATGATCCGCTTCTC 575
 Db 481 TACATGACGTGTCTCGCGCGGATGTGTCGCGTGGCGACCGGATGATTCCTTCTC 540

QY 576 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 635
 Db 541 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 600

QY 636 CTGGTGGCGAGCGAGCGCC 655
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Db	601	CTGGTCCGTAGCAGGCCCC 620	
RESULT 11			
US-08-520-946-138/c			
; Sequence 138, Application US/08520946			
; Patent No. 6372424			
; GENERAL INFORMATION:			
; APPLICANT: BROW, MARY ANN D.			
; APPLICANT: LYAMICHEV, VICTOR I.			
; APPLICANT: OLIVE, DAVID M.			
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF			
; TITLE OF INVENTION: PATHOGENS			
; NUMBER OF SEQUENCES: 160			
; CORRESPONDENCE ADDRESS:			
; ADDRESSER: MEDLEN & CARROLL			
; STREET: 220 MONTGOMERY STREET, SUITE 2200			
; CITY: SAN FRANCISCO			
; STATE: CALIFORNIA			
; COUNTRY: UNITED STATES OF AMERICA			
; ZIP: 94104			
; COMPUTER READABLE FORM:			
; MEDIUM TYPE: Floppy disk			
; COMPUTER: IBM PC compatible			
; OPERATING SYSTEM: PC-DOS/MS-DOS			
; SOFTWARE: Patent In Release #1.0, Version #1.25			
; CURRENT APPLICATION DATA:			
; APPLICATION NUMBER: US/08/520,946			
; FILING DATE:			
; CLASSIFICATION: 435			
; ATTORNEY/AGENT INFORMATION:			
; NAME: CARROLL, PETER G.			
; REGISTRATION NUMBER: 32,837			
; REFERENCE/DOCKET NUMBER: FORS-01756			
; TELECOMMUNICATION INFORMATION:			
; TELEPHONE: (415) 705-8410			
; TELEFAX: (415) 397-8338			
; INFORMATION FOR SEQ ID NO: 138:			
; SEQUENCE CHARACTERISTICS:			
; LENGTH: 620 base pairs			
; TYPE: nucleic acid			
; STRANDEDNESS: single			
; TOPOLOGY: linear			
; MOLECULE TYPE: DNA (genomic)			
; US-08-520-946-138			
Query Match 75.2%; Score 530.4; DB 4; Length 620;			
Best Local Similarity 91.0%; Pred. No. 4.6e-96;			
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;			
Qy	36	ATCAACATCCGTCAGTGGCGGCGATCAAGAGTTCTTGGCACACCGAGCTGCC 95	
Db	620	ATCAACATCCGCGGTGGTGGCGGATCAAGAGTTCTTGGCACACCGAGCTGAGC 561	
Qy	96	CAGTTATGACAGACACCCGCTGTCGGGTCAACACAGCGCCGCTGTCGGCG 155	
Db	560	CAATTATGACAGACACCCGCTGTCGGGTGACCCACAGCGCCGCTGTCGGCG 501	
Qy	156	CTGGGCCCGGGTGTCTGTCCTCCGGAGCGCGGGCTGGAGGTCGCGACGTGACCCG 215	
Db	500	CTGGGGCCGGCGGTCTGTCACTGAGCTGCGGGGTGGAGGTCGCGACGTGACCCG 441	
Qy	216	TCCCACTACGCGCGGATGTCGCGGATCGAGACCCCGAGGGTCCCAACATCGTCTGATC 275	
Db	440	TCCCACTACGCGCGGATGTCGCGGATCGAGACCCCGAGGGTCCCAACATCGTCTGATC 381	
Qy	276	GGCTCGCTGTGCTGATGCGCGGTCAACCGTTCCGGTTTCATCGAGAGCGGTACCGC 335	
Db	380	GGCTCGCTGTGCTGATGCGCGGTCAACCGTTCCGGTTTCATCGAAAGCGCGTACCGC 321	
Qy	336	AAGTGGTCGACGCGGTGGTCACCGAGAGATCCACTACCTGACCGCGCAGAGAGGAC 395	
Db	320	AAGTGGTCGACGCGGTGGTTAGCGACGAGATCGTGTACCTGACCGCGCAGAGAGGAC 261	

Qy	396	CGCCACGTGGTGGCGCAGGCCAACTCGCGGATCGGACCAAGGGCCGTTTCGCGAGGCC 455	
Db	260	CGCCACGTGGTGGCGCAGGCCAAATTCGCCGATCGATCGGACCGTTCGTTCTGTCAGCGC 201	
Qy	456	CGGGTGTGGTCCGCGCGCAAGCGCGGCGAGGTCGAGTAGCTGCCCTCGTCCGAGGTGGAC 515	
Db	200	CGCGTGTGGTCCGCGCGCAAGCGCGGCGAGGTGGAGTAGCTGCGCTCGTCTGAGGTGGAC 141	
Qy	516	TACATGACGTGTCCGCGCGCAGATGGTGTGGTGGCCACCGCGATGATCCGTTCTCTC 575	
Db	140	TACATGGAGCTCTCGCGCGCCAGATGGTGTGGTGGCCACCGCGATGATCCCTTCCTG 81	
Qy	576	GAGCAGCAGCAGCCAAACCGTCCCTGATGGCGGCCAACATCAGCGCCAGCGGTTCG 635	
Db	80	GAGCAGCAGCAGCCAAACCGTCCCTCATGGGGGCAACATGACAGCGCCAGCGGTGGCG 21	
Qy	636	CTGGTGGCGCAGCGAGGCC 655	
Db	20	CTGGTCCGTAGCGAGGCC 1	

RESULT 12

US-09-655-378A-135

; Sequence 135, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; APPLICANT: LYAMICHEV, VICTOR I.

; APPLICANT: OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; TITLE OF INVENTION: PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSER: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent In Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 135:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 135:

US-09-655-378A-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 4.6e-96;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCAGTGGCGGCGATCAAGAGTTCTTGGCACACCGAGCTGCC 95

Db 620 ATCAACATCCGCGGTGGTGGCGGATCAAGAGTTCTTGGCACACCGAGCTGAGC 561

Qy 96 CAGTTATGACAGACACCCGCTGTCGGGTCAACACAGCGCCGCTGTCGGCG 155

Db 560 CAATTATGACAGACACCCGCTGTCGGGTGACCCACAGCGCCGCTGTCGGCG 501

Qy 156 CTGGGCCCGGGTGTCTGTCCTCCGGAGCGCGGGCTGGAGGTCGCGACGTGACCCG 215

Db 500 CTGGGGCCGGCGGTCTGTCACTGAGCTGCGGGGTGGAGGTCGCGACGTGACCCG 441

Qy 216 TCCCACTACGCGCGGATGTCGCGGATCGAGACCCCGAGGGTCCCAACATCGTCTGATC 275

Db 440 TCCCACTACGCGCGGATGTCGCGGATCGAGACCCCGAGGGTCCCAACATCGTCTGATC 381

Qy 276 GGCTCGCTGTGCTGATGCGCGGTCAACCGTTCCGGTTTCATCGAGAGCGGTACCGC 335

Db 380 GGCTCGCTGTGCTGATGCGCGGTCAACCGTTCCGGTTTCATCGAAAGCGCGTACCGC 321

Qy 336 AAGTGGTCGACGCGGTGGTCACCGAGAGATCCACTACCTGACCGCGCAGAGAGGAC 395

Db 320 AAGTGGTCGACGCGGTGGTTAGCGACGAGATCGTGTACCTGACCGCGCAGAGAGGAC 261

[illegible]

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Db      241 GGCTCGTCTGCTGTACGGCGGGTCAACCCGTTTCGGTTTCATCGAAACGCCGTACCGC 300
QY      336 AAGGTGTCGACGGCGTGTGTACCGACGAGATCCACTACCTGACCGCGCCGACGAGGAGGAC 395
Db      301 AAGGTGTCGACGGCGTGTGTACCGACGAGATCCACTACCTGACCGCGCCGACGAGGAGGAC 360
QY      396 CGCCACGTGTGGCGGAGGCCAACTCGCCGATCGACGACAAGGGCCGGTTTCGGGAGGCC 455
Db      361 CGCCACGTGTGGCGACAGGCCAAATTCGCCGATCGATCGGACGGTCGCTTCGTCGAGCCG 420
QY      456 CGGCTGTGTGTCGCGCGCAAGCGGCGGAGGTCGAGTACGTGCGCCTTCGTCGAGGTGGAC 515
Db      421 CGCGTGTGTGTCGCGCGCAAGCGGCGGAGGTCGAGTACGTGCGCCTTCGTCGAGGTGGAC 480
QY      516 TACATGGACGTGTGCGCGCCAGATGTTGTCGGTGGCCACCGCGATGATCCCGTTCCTC 575
Db      481 TACATGGACGTGTGCGCGCCAGATGTTGTCGGTGGCCACCGCGATGATCCCGTTCCTG 540
QY      576 GAGCAGGAGGAGCCAAACCGTCCCTGATGGCGGCAACATGACGCGCCAGCGCGTTCCG 635
Db      541 GAGCAGGAGGAGCCAAACCGTCCCTGATGGCGGCAACATGACGCGCCAGCGCGTTCCG 600
QY      636 CTGTTGCGCAGCGAGCGGCC 655
Db      601 CTGTTGCGCAGCGAGGCC 620

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Search completed: August 19, 2004, 14:45:05
 Job time : 79.4446 secs

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QY	181	ACGGGCGGGCTGGAGTCCGCGAGTGCACCCCGTCCCACTACGCGCGGATGTGCCCGA	240		121	TGTCGGGGCTCACCCACAAAGCGCGCTGTGCGCGCTGGCGCGGTGTCTGTCTCCCGG	180
Db	181	ACGGGCGGGCTGGAGTCCGCGAGTGCACCCCGTCCCACTACGCGCGGATGTGCCCGA	240		181	ACGGGCGGGCTGGAGTCCGCGAGTGCACCCCGTCCCACTACGCGCGGATGTGCCCGA	240
QY	241	TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGTGTGCGTGTATGCCCGG	300		181	ACGGGCGGGCTGGAGTCCGCGAGTGCACCCCGTCCCACTACGCGCGGATGTGCCCGA	240
Db	241	TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGTGTGCGTGTATGCCCGG	300		241	TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGTGTGCGTGTATGCCCGG	300
QY	301	TCAACCGGTTCGGGTTTCATCGAGACCGCTACCGAAGGTGGTTCGACGGCGTGCACCG	360		241	TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGTGTGCGTGTATGCCCGG	300
Db	301	TCAACCGGTTCGGGTTTCATCGAGACCGCTACCGAAGGTGGTTCGACGGCGTGCACCG	360		301	TCAACCGGTTCGGGTTTCATCGAGACCGCTACCGAAGGTGGTTCGACGGCGTGCACCG	360
QY	361	ACGAGATCCACTACCTACCGCCGAGAGGAGGACCGCCACGCTGGTGGCGCAGGCCAACT	420		301	TCAACCGGTTCGGGTTTCATCGAGACCGCTACCGAAGGTGGTTCGACGGCGTGCACCG	360
Db	361	ACGAGATCCACTACCTACCGCCGAGAGGAGGACCGCCACGCTGGTGGCGCAGGCCAACT	420		361	ACGAGATCCACTACCTACCGCCGAGAGGAGGACCGCCACGCTGGTGGCGCAGGCCAACT	420
QY	421	CGCGGATTCGAGACCAAGGGCCGGTTCGCGAGGCGCGGGTGTGCTGGTCCGCGAAGCGG	480		361	ACGAGATCCACTACCTACCGCCGAGAGGAGGACCGCCACGCTGGTGGCGCAGGCCAACT	420
Db	421	CGCGGATTCGAGACCAAGGGCCGGTTCGCGAGGCGCGGGTGTGCTGGTCCGCGAAGCGG	480		421	CGCGGATTCGAGACCAAGGGCCGGTTCGCGAGGCGCGGGTGTGCTGGTCCGCGAAGCGG	480
QY	481	GCAGGTCGAGTACGTCGCCCTCGTCGAGGTGGACTACATGGACGTGTCCGCGCGCCAGA	540		421	CGCGGATTCGAGACCAAGGGCCGGTTCGCGAGGCGCGGGTGTGCTGGTCCGCGAAGCGG	480
Db	481	GCAGGTCGAGTACGTCGCCCTCGTCGAGGTGGACTACATGGACGTGTCCGCGCGCCAGA	540		481	GCAGGTCGAGTACGTCGCCCTCGTCGAGGTGGACTACATGGACGTGTCCGCGCGCCAGA	540
QY	541	TGCTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGCGCAACCGTGCCC	600		481	GCAGGTCGAGTACGTCGCCCTCGTCGAGGTGGACTACATGGACGTGTCCGCGCGCCAGA	540
Db	541	TGCTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGCGCAACCGTGCCC	600		541	TGCTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGCGCAACCGTGCCC	600
QY	601	TGATGGCGCCCAACATGACGAGCGCGAGGGTTCGCTGGTGGCGAGGCGCGCTGG	660		541	TGCTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGCGCAACCGTGCCC	600
Db	601	TGATGGCGCCCAACATGACGAGCGCGAGGGTTCGCTGGTGGCGAGGCGCGCTGG	660		601	TGATGGCGCCCAACATGACGAGCGCGAGGGTTCGCTGGTGGCGAGGCGCGCTGG	660
QY	661	TGGCACCGCATGAGCTGCGCGCGCATGCGAGCGCGGACGT	705		601	TGATGGCGCCCAACATGACGAGCGCGAGGGTTCGCTGGTGGCGAGGCGCGCTGG	660
Db	661	TGGCACCGCATGAGCTGCGCGCGCATGCGAGCGCGGACGT	705		661	TGGCACCGCATGAGCTGCGCGCGCATGCGAGCGCGGACGT	705
RESULT 2							
US-09-285-306-5							
; Sequence 5, Application US/09285306A							
; Publication No. US20020187467A1							
; GENERAL INFORMATION:							
; APPLICANT: Gingeras, Thomas							
; APPLICANT: Drenkow, Jorg							
; APPLICANT: Affymetrix, Inc.							
; TITLE OF INVENTION: Mycobacterial rpoB Sequences							
; FILE REFERENCE: 018547-018570US							
; CURRENT APPLICATION NUMBER: US/09/285,306A							
; CURRENT FILING DATE: 1999-04-02							
; EARLIER APPLICATION NUMBER: US 60/080,616							
; EARLIER FILING DATE: 1998-04-03							
; NUMBER OF SEQ ID NOS: 181							
; SOFTWARE: FastSeq for Windows Version 3.0							
; SEQ ID NO 5							
; LENGTH: 705							
; TYPE: DNA							
; ORGANISM: Mycobacterium avium							
US-09-285-306-5							
Query Match 100.0%; Score 705; DB 9; Length 705;							
Best Local Similarity 100.0%; Pred. No. 2.1e-154;							
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;							
QY	1	CCGAGAGCTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG	60		661	TGGCACCGCATGAGCTGCGCGCGCATGCGAGCGCGGACGT	705
Db	1	CCGAGAGCTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCCGTGGCGG	60		661	TGGCACCGCATGAGCTGCGCGCGCATGCGAGCGCGGACGT	705
QY	61	CGATCAAGGAGTCTTCGGCACCGACGAGTGTCCAGTTCATGGACGAGAACACCCGC	120				
Db	61	CGATCAAGGAGTCTTCGGCACCGACGAGTGTCCAGTTCATGGACGAGAACACCCGC	120				
QY	121	TGTCGGGGCTCACCCACAAAGCGCGCTGCGGCGTGGGCGCGGTGTCTGCCCGG	180				

QY 121 TGTGGGCTCACCACAAAGCGCCCTGTGGCGCTGGCCGGTGGTCTGTCCCGG 180
 Db 121 TGTGGGCTCACCACAAAGCGCCCTGTGGCGCTGGCCGGTGGTCTGTCCCGG 180
 QY 181 AGCGGCGGGCTGGAGTCCGCGACGTGCAACCCCTCCCACTACGCGCGGATGTCGCGA 240
 Db 181 AGCGGCGGGCTGGAGTCCGCGACGTGCAACCCCTCCCACTACGCGCGGATGTCGCGA 240
 QY 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGCTGATGCGG 300
 Db 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGCTGATGCGG 300
 QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGCAAGGTGGTTCACGCGGTGTCACG 360
 Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGCAAGGTGGTTCACGCGGTGTCACG 360
 QY 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCCAGTGGTGGCGAGGCCAACT 420
 Db 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCCAGTGGTGGCGAGGCCAACT 420
 QY 421 CGCGATCGAGCAAGGCGCGTTCGCGGAGGCGCGGTCGTCGCGCGAAGGCGG 480
 Db 421 CGCGATCGAGCAAGGCGCGTTCGCGGAGGCGCGGTCGTCGCGCGAAGGCGG 480
 QY 481 GCGAGTCCAGTACGTCGCTTCGCGAGTGGTACTACATGAGTGGTTCGCGCGCAG 540
 Db 481 GCGAGTCCAGTACGTCGCTTCGCGAGTGGTACTACATGAGTGGTTCGCGCGCAG 540
 QY 541 TGGTGGTGGCGCACCGCGATGATCCGTTCTTCGAGCAGCAGACGCCAACCGTGCCC 600
 Db 541 TGGTGGTGGCGCACCGCGATGATCCGTTCTTCGAGCAGCAGACGCCAACCGTGCCC 600
 QY 601 TGATGGGCGCCACATCGAGCGCCAGCGGTTCCGCTGGTGGCAGGAGCGCGCTGG 660
 Db 601 TGATGGGCGCCACATCGAGCGCCAGCGGTTCCGCTGGTGGCAGGAGCGCGCTGG 660
 QY 661 TGGCACCGCATGAGTTCGCGCGCGCATCGACGCGGCGACGT 705
 Db 661 TGGCACCGCATGAGTTCGCGCGCGCATCGACGCGGCGACGT 705
 RESULT 4
 US-09-285-306-7
 ; Sequence 7, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: GINGERAS, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 7
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-7

Query Match 100.0%; Score 705; DB 9; Length 705;
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CCCAGGAGCTGGAGGCGATCACACCGAGCCCTGTATCAATCCCTGTCAGTGGCGG 60
 Db 1 CCCAGGAGCTGGAGGCGATCACACCGAGCCCTGTATCAATCCCTGTCAGTGGCGG 60
 QY 61 CGATCAAGGAGTCTTCGCGCACCGACCGAGCTGTCCAGTTCATGGACCAACAACCCG 120

Db 61 CGATCAAGGAGTCTTCGCGCACCGACCGAGCTGTCCAGTTCATGACCAACAACCCG 120
 QY 121 TGTGGGCTCACCACAAAGCGCCCTGTGGCGCTGGCCGGTGGTCTGTCCCGG 180
 Db 121 TGTGGGCTCACCACAAAGCGCCCTGTGGCGCTGGCCGGTGGTCTGTCCCGG 180
 QY 181 AGCGGCGGGCTGGAGTCCGCGACGTGCAACCCCTCCCACTACGCGCGGATGTCGCGA 240
 Db 181 AGCGGCGGGCTGGAGTCCGCGACGTGCAACCCCTCCCACTACGCGCGGATGTCGCGA 240
 QY 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGCTGATGCGG 300
 Db 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGCTGATGCGG 300
 QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGCAAGGTGGTTCACGCGGTGTCACG 360
 Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGTACCGCAAGGTGGTTCACGCGGTGTCACG 360
 QY 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCCAGTGGTGGCGAGGCCAACT 420
 Db 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCCAGTGGTGGCGAGGCCAACT 420
 QY 421 CGCGATCGAGCAAGGCGCGTTCGCGGAGGCGCGGTCGTCGCGCGAAGGCGG 480
 Db 421 CGCGATCGAGCAAGGCGCGTTCGCGGAGGCGCGGTCGTCGCGCGAAGGCGG 480
 QY 481 GCGAGTCCAGTACGTCGCTTCGCGAGTGGTACTACATGAGTGGTTCGCGCGCAG 540
 Db 481 GCGAGTCCAGTACGTCGCTTCGCGAGTGGTACTACATGAGTGGTTCGCGCGCAG 540
 QY 541 TGGTGGTGGCGCACCGCGATGATCCGTTCTTCGAGCAGCAGACGCCAACCGTGCCC 600
 Db 541 TGGTGGTGGCGCACCGCGATGATCCGTTCTTCGAGCAGCAGACGCCAACCGTGCCC 600
 QY 601 TGATGGGCGCCACATCGAGCGCCAGCGGTTCCGCTGGTGGCAGGAGCGCGCTGG 660
 Db 601 TGATGGGCGCCACATCGAGCGCCAGCGGTTCCGCTGGTGGCAGGAGCGCGCTGG 660
 QY 661 TGGCACCGCATGAGTTCGCGCGCGCATCGACGCGGCGACGT 705
 Db 661 TGGCACCGCATGAGTTCGCGCGCGCATCGACGCGGCGACGT 705
 RESULT 5
 US-09-285-306-8
 ; Sequence 8, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: GINGERAS, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 8
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-8

Query Match 100.0%; Score 705; DB 9; Length 705;
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CCCAGGAGCTGGAGGCGATCACACCGAGCCCTGTATCAATCCCTGTCAGTGGCGG 60
 Db 1 CCCAGGAGCTGGAGGCGATCACACCGAGCCCTGTATCAATCCCTGTCAGTGGCGG 60

QY	61	CGATCAAGAGTTCTTGGGACCAAGCAGTGTCCAGTTTATGAGACCAAGAACACCCG	120
Db	61	CGATCAAGAGTTCTTGGGACCAAGCAGTGTCCAGTTTATGAGACCAAGAACACCCG	120
QY	121	TGTGGGGCTCACACAAAGCGCGCTGTGGCGCTGGCGCCGGTGTCTGTCCCGG	180
Db	121	TGTGGGGCTCACACAAAGCGCGCTGTGGCGCTGGCGCCGGTGTCTGTCCCGG	180
QY	181	AGCGGGCGGGCTGAGAGTCCGCGACGTGCACCCCGTCCCACTACGCGCGGATGTCCCGA	240
Db	181	AGCGGGCGGGCTGAGAGTCCGCGACGTGCACCCCGTCCCACTACGCGCGGATGTCCCGA	240
QY	241	TCGAGACCCGAGAGTCCCAACATCGGTCTGATCGCTCGCTCGGTGTATGCGCGG	300
Db	241	TCGAGACCCGAGAGTCCCAACATCGGTCTGATCGCTCGCTCGGTGTATGCGCGG	300
QY	301	TCAACCGGTTCCGGTTTCATCGAGACGCGTACCGCAAGGTGTGACGCGGTGTCACCG	360
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QY	361	ACGAGATCCACTACCTGACCGCGACGAGAGGACCGCACGTGTGGCGAGGCCAACT	420
Db	361	ACGAGATCCACTACCTGACCGCGACGAGAGGACCGCACGTGTGGCGAGGCCAACT	420
QY	421	CGCCGATCGACACAAAGGCGGTTCCGAGAGCGCGGTGCTGTCCCGCGAGGCGG	480
Db	421	CGCCGATCGACACAAAGGCGGTTCCGAGAGCGCGGTGCTGTCCCGCGAGGCGG	480
QY	481	GGAGGTCCAGTACGTCCTCGTCCGAGTGGAGTACATGAGACGTGTCCCGCGCAGA	540
Db	481	GGAGGTCCAGTACGTCCTCGTCCGAGTGGAGTACATGAGACGTGTCCCGCGCAGA	540
QY	541	TGCTGTGCGTGGCCACCGCGATGATCCCTTCTCGAGCACGACGACCGTGTGCC	600
Db	541	TGCTGTGCGTGGCCACCGCGATGATCCCTTCTCGAGCACGACGACCGTGTGCC	600
QY	601	TGATGGCGCCACATGACGCGCGCGTTCGCTGCTGCGAGGCGCGCGCTGG	660
Db	601	TGATGGCGCCACATGACGCGCGCGTTCGCTGCTGCGAGGCGCGCGCTGG	660
QY	661	TGGGACCGGCATGGAGCTGGCGCGCGGATCGACGCGCGAGCT	705
Db	661	TGGGACCGGCATGGAGCTGGCGCGCGGATCGACGCGCGAGCT	705
RESULT 6			
US-09-285-306-9			
; Sequence 9, Application US/09285306A			
; Publication No. US20020187467A1			
; GENERAL INFORMATION:			
; APPLICANT: Gingeras, Thomas			
; APPLICANT: Drenkow, Jorg			
; APPLICANT: Affymetrix, Inc.			
; TITLE OF INVENTION: Mycobacterial rpoB Sequences			
; FILE REFERENCE: 018547-018570US			
; CURRENT APPLICATION NUMBER: US/09/285, 306A			
; CURRENT FILING DATE: 1999-04-02			
; EARLIER APPLICATION NUMBER: US 60/080, 616			
; EARLIER FILING DATE: 1998-04-03			
; NUMBER OF SEQ ID NOS: 181			
; SOFTWARE: FastSeq for Windows Version 3.0			
; SEQ ID NO 9			
; LENGTH: 705			
; TYPE: DNA			
; ORGANISM: Mycobacterium avium			
US-09-285-306-9			
Query Match 100.0%; Score 705; DB 9; Length 705;			
Best Local Similarity 100.0%; Pred. No. 2.1e-154; Indels 0; Gaps 0;			
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;			
QY	1	CCGAGGAGTGGAGGCGATCACACCGAGAGCCCTGTATGATCAATCGTCCAGTCTGTGGCG	60

Qy	1	CCCAGGACGTGGAGCGGATCACACCGCAGACCTGATCAACATCCGTCCAGTCGTGGCGG	60
Db	1	CCCAGGACGTGGAGCGGATCACACCGCAGACCTGATCAACATCCGTCCAGTCGTGGCGG	60
Qy	61	CGATCAAGGAGTTCCTTGGGACACGACAGCTGTCCAGTTCATGGACCAAGAAACAACCCGC	120
Db	61	CGATCAAGGAGTTCCTTGGGACACGACAGCTGTCCAGTTCATGGACCAAGAAACAACCCGC	120
Qy	121	TGTCGGGGCTCACCCACAAGCGCGCCTGTTCGGCGCTGGGCCCGGGTGTCTGTCCCGGG	180
Db	121	TGTCGGGGCTCACCCACAAGCGCGCCTGTTCGGCGCTGGGCCCGGGTGTCTGTCCCGGG	180
Qy	181	AGCGGGCGGGCTGGAGGTTCGGCGACGTGCACCCGCTCCCACTACCGCGCGGATGTGCCGA	240
Db	181	AGCGGGCGGGCTGGAGGTTCGGCGACGTGCACCCGCTCCCACTACCGCGCGGATGTGCCGA	240
Qy	241	TCGAGACCCCGGAGGGTCCCAACATTCGGTCTGATCGGCTCGGTTCGGTGTATCGCGGG	300
Db	241	TCGAGACCCCGGAGGGTCCCAACATTCGGTCTGATCGGCTCGGTTCGGTGTATCGCGGG	300
Qy	301	TCAACCGGTTTCGGGTTTCATTCGAGACGCGCTACCGAAGTGGTTCGACGGCGTGTTCACCG	360
Db	301	TCAACCGGTTTCGGGTTTCATTCGAGACGCGCTACCGAAGTGGTTCGACGGCGTGTTCACCG	360
Qy	361	ACGAGATCCACTACTCGACCGCCACGAGGAGGACCGCCAGTCGGTTCGGTTCGGCCGAAGCGG	420
Db	361	ACGAGATCCACTACTCGACCGCCACGAGGAGGACCGCCAGTCGGTTCGGTTCGGCCGAAGCGG	420
Qy	421	CGCCGATCAGACGCAAGGGCCGGTTTCGGAGGCCCCGGGTCTGGTTCGGCCGAAGCGG	480
Db	421	CGCCGATCAGACGCAAGGGCCGGTTTCGGAGGCCCCGGGTCTGGTTCGGCCGAAGCGG	480
Qy	481	GGCAGGTCGAGTACGTGCCCTTCGTCGAGGTGGACTACATGGACGTTCGCGCGCCAGA	540
Db	481	GGCAGGTCGAGTACGTGCCCTTCGTCGAGGTGGACTACATGGACGTTCGCGCGCCAGA	540
Qy	541	TGCTGTTCGGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCGCCAAACCGTGCCC	600
Db	541	TGCTGTTCGGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCGCCAAACCGTGCCC	600
Qy	601	TGATGGGCCCAACATGCAGCGCCAGCGCGGTTCCGCTGGTTCGACGAGCGCGCCGTGG	660
Db	601	TGATGGGCCCAACATGCAGCGCCAGCGCGGTTCCGCTGGTTCGACGAGCGCGCCGTGG	660
Qy	661	TGGGCACCGGCATGAGCTGCGCGCGCGGATCGACGGCGCAGT	705
Db	661	TGGGCACCGGCATGAGCTGCGCGCGCGGATCGACGGCGCAGT	705

```

RESULT 8
US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US2002C187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jory
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 131
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 13
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-13

```

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2.1e-154; Matches 705; Conservative 0; Mismatches 0; Indels	
QY	1 CCCAGGAGCTGGAGGGATCAACCCGAGACCCCTGATCAACATCCGTG
Db	1 CCCAGGAGCTGGAGGGATCAACCCGAGACCCCTGATCAACATCCGTG
QY	61 CGATCAAGGAGTCTTCGSGCACCGCCAGCTGTCCAGTTTCATGGACCC
Db	61 CGATCAAGGAGTCTTCGSGCACCGCCAGCTGTCCAGTTTCATGGACCC
QY	121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGCGCTGGGCCCCGGGTG
Db	121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGCGCTGGGCCCCGGGTG
QY	181 AGCGGGCCGGCTGGAGTTCGCGACGTGCACCCGTCCCACTACGCGCC
Db	181 AGCGGGCCGGCTGGAGTTCGCGACGTGCACCCGTCCCACTACGCGCC
QY	241 TCGAGACCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGGTGTCGG
Db	241 TCGAGACCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGGTGTCGG
QY	301 TCAACCCGTTCCGGTTCATTCGAGACGCGTACCGCAAGGTGTCGACGG
Db	301 TCAACCCGTTCCGGTTCATTCGAGACGCGTACCGCAAGGTGTCGACGG
QY	361 ACAGATCCACTACTTCGACCGCCGACGAGGAGGACCGCCACGTGTGG
Db	361 ACAGATCCACTACTTCGACCGCCGACGAGGAGGACCGCCACGTGTGG
QY	421 CGCGGATCGACGACAAGGGCGCGTTTCGCGAGGCCCGGTGTGTCCTCC
Db	421 CGCGGATCGACGACAAGGGCGCGTTTCGCGAGGCCCGGTGTGTCCTCC
QY	481 GCAGGTTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGCACTGTGTC
Db	481 GCAGGTTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGCACTGTGTC
QY	541 TGGTGTTCGTTGGCCACCGCGATGATCCGTTTCCTCGAGCAGCACGCG
Db	541 TGGTGTTCGTTGGCCACCGCGATGATCCGTTTCCTCGAGCAGCACGCG
QY	601 TGATGGCGCCCAACATGCAAGCGCCAGCGGTTCCGCTGGTCCGACGACA
Db	601 TGATGGCGCCCAACATGCAAGCGCCAGCGGTTCCGCTGGTCCGACGACA
QY	661 TGGGCACCGCATGGAGTTCGCGCGCGCGATTCGACGCGCGACGT 705
Db	661 TGGGCACCGCATGGAGTTCGCGCGCGCGATTCGACGCGCGACGT 705

```

RESULT 9
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700S
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14

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i: ORGANISM: Mycobacterium avium
US-09-285-306-16
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGAGTGTGAGGCGGATCACACCGAGAGCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 1 CCCAGGAGTGTGAGGCGGATCACACCGAGAGCCCTGATCAACATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGAGGTTCTTCGGACACCGAGCTGTCCAGTTCATGACAGAGAACACCCCG 120
Db 61 CGATCAAGAGGTTCTTCGGACACCGAGCTGTCCAGTTCATGACAGAGAACACCCCG 120
QY 121 TGTCCGGGCTCACCCACAGCGCGCTGTCCGCGCTGGGCCCGGCTGTCTGTCCCGG 180
Db 121 TGTCCGGGCTCACCCACAGCGCGCTGTCCGCGCTGGGCCCGGCTGTCTGTCCCGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCCACCGTCCACCTACGCGCGGATGTGCCGA 240
Db 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCCACCGTCCACCTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGGAGGTCGCGAGCTGCCACCGTCCACCTACGCGCGGATGTGCCGA 300
Db 241 TCGAGACCCCGGAGGTCGCGAGCTGCCACCGTCCACCTACGCGCGGATGTGCCGA 300
QY 301 TCAACCCGTTCCGTTTCATCGAGACGCGCTTACCGCAAGGTGGTCGACGGCGTGTACCG 360
Db 301 TCAACCCGTTCCGTTTCATCGAGACGCGCTTACCGCAAGGTGGTCGACGGCGTGTACCG 360
QY 361 ACAGATCCACTACTGACCGCGAGAGGACCGGACCGGACCGGACCGGACCGGACCGG 420
Db 361 ACAGATCCACTACTGACCGCGAGAGGACCGGACCGGACCGGACCGGACCGGACCGG 420
QY 421 CGCGGATCGAGCAAGGCGCGGTCGCGAGGCGCGGTCGCGGAGCGCGGTCGCGGAGCGG 480
Db 421 CGCGGATCGAGCAAGGCGCGGTCGCGAGGCGCGGTCGCGGAGCGCGGTCGCGGAGCGG 480
QY 481 GCGAGGTCGAGTACGTCGCGCTTCGTCGAGTGGACTACATGAGCGTGTCCGCGCGCAGA 540
Db 481 GCGAGGTCGAGTACGTCGCGCTTCGTCGAGTGGACTACATGAGCGTGTCCGCGCGCAGA 540
QY 541 TGTGTGCGTGGCGACCGCGATGATCCGTTCTTCGAGGACGAGCGGACCGGTCGCGG 600
Db 541 TGTGTGCGTGGCGACCGCGATGATCCGTTCTTCGAGGACGAGCGGACCGGTCGCGG 600
QY 601 TGATGGCGCCCAACATCGAGCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCG 660
Db 601 TGATGGCGCCCAACATCGAGCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCG 660
QY 661 TGGGACCGGATGAGCTGCGCGCGGATCGAGCGGCGGACGT 705
Db 661 TGGGACCGGATGAGCTGCGCGCGGATCGAGCGGCGGACGT 705

RESULT 11
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Giergas, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24

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Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGAGTGTGAGGCGGATCACACCGAGAGCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 1 CCCAGGAGTGTGAGGCGGATCACACCGAGAGCCCTGATCAACATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGAGGTTCTTCGGACACCGAGCTGTCCAGTTCATGACAGAGAACACCCCG 120
Db 61 CGATCAAGAGGTTCTTCGGACACCGAGCTGTCCAGTTCATGACAGAGAACACCCCG 120
QY 121 TGTCCGGGCTCACCCACAGCGCGCTGTCCGCGCTGGGCCCGGCTGTCTGTCCCGG 180
Db 121 TGTCCGGGCTCACCCACAGCGCGCTGTCCGCGCTGGGCCCGGCTGTCTGTCCCGG 180
QY 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCCACCGTCCACCTACGCGCGGATGTGCCGA 240
Db 181 AGCGGCGCGGCTGGAGGTCGCGAGCTGCCACCGTCCACCTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGGAGGTCGCGAGCTGCCACCGTCCACCTACGCGCGGATGTGCCGA 300
Db 241 TCGAGACCCCGGAGGTCGCGAGCTGCCACCGTCCACCTACGCGCGGATGTGCCGA 300
QY 301 TCAACCCGTTCCGTTTCATCGAGACGCGCTTACCGCAAGGTGGTCGACGGCGTGTACCG 360
Db 301 TCAACCCGTTCCGTTTCATCGAGACGCGCTTACCGCAAGGTGGTCGACGGCGTGTACCG 360
QY 361 ACAGATCCACTACTGACCGCGAGAGGACCGGACCGGACCGGACCGGACCGGACCGG 420
Db 361 ACAGATCCACTACTGACCGCGAGAGGACCGGACCGGACCGGACCGGACCGGACCGG 420
QY 421 CGCGGATCGAGCAAGGCGCGGTCGCGAGGCGCGGTCGCGGAGCGCGGTCGCGGAGCGG 480
Db 421 CGCGGATCGAGCAAGGCGCGGTCGCGAGGCGCGGTCGCGGAGCGCGGTCGCGGAGCGG 480
QY 481 GCGAGGTCGAGTACGTCGCGCTTCGTCGAGTGGACTACATGAGCGTGTCCGCGCGCAGA 540
Db 481 GCGAGGTCGAGTACGTCGCGCTTCGTCGAGTGGACTACATGAGCGTGTCCGCGCGCAGA 540
QY 541 TGTGTGCGTGGCGACCGCGATGATCCGTTCTTCGAGGACGAGCGGACCGGTCGCGG 600
Db 541 TGTGTGCGTGGCGACCGCGATGATCCGTTCTTCGAGGACGAGCGGACCGGTCGCGG 600
QY 601 TGATGGCGCCCAACATCGAGCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCG 660
Db 601 TGATGGCGCCCAACATCGAGCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCG 660
QY 661 TGGGACCGGATGAGCTGCGCGCGGATCGAGCGGCGGACGT 705
Db 661 TGGGACCGGATGAGCTGCGCGCGGATCGAGCGGCGGACGT 705

RESULT 10
US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Giergas, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; LENGTH: 705
; TYPE: DNA

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; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCCGTGGCGG 60
Db 1 CCCAGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCCGTGGCGG 60
QY 61 CGATCAAGAGTTCCTTCGGCACCGACAGCTGTCCAGTTCATGGACCAAGAACACCCCG 120
Db 61 CGATCAAGAGTTCCTTCGGCACCGACAGCTGTCCAGTTCATGGACCAAGAACACCCCG 120
QY 121 TGTTCGGGGTCAACCAAGCGCGCTGTTCGGCGCTGGCGCGGTGTCTGTCCCGGG 180
Db 121 TGTTCGGGGTCAACCAAGCGCGCTGTTCGGCGCTGGCGCGGTGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGGTGGAGTCCCGAGCTGACCCCTGCCACTACGCGCGGATGTGCCCGA 240
Db 181 AGCGGCGCGGGTGGAGTCCCGAGCTGACCCCTGCCACTACGCGCGGATGTGCCCGA 240
QY 241 TCGAGACCCCGGAGGTCCTCAACATCGTCTGATCGGCTCGCTGTTCGCTGTATGCGCGG 300
Db 241 TCGAGACCCCGGAGGTCCTCAACATCGTCTGATCGGCTCGCTGTTCGCTGTATGCGCGG 300
QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGAAGGTGTGTCAGCGCGTGGTCAACG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGAAGGTGTGTCAGCGCGTGGTCAACG 360
QY 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCAAGGTGTGTCAGCGCGTGGTCAACG 420
Db 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCAAGGTGTGTCAGCGCGTGGTCAACG 420
QY 421 CGCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCGGTTCGCGAGGCGCGGTTCGCGAGGCGG 480
Db 421 CGCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCGGTTCGCGAGGCGCGGTTCGCGAGGCGG 480
QY 481 GCGAGTTCAGTACGTCCCTTCGTCAGAGTGGACTACATGACAGCTGTTCGCGCGCCAGA 540
Db 481 GCGAGTTCAGTACGTCCCTTCGTCAGAGTGGACTACATGACAGCTGTTCGCGCGCCAGA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGACGACGACGACGACG 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGACGACGACGACGACG 600
QY 601 TGATGGCGCCAAACATGACGCGCGGCTTCGCTGTGTCGAGCGAGGCGCGGCTGG 660
Db 601 TGATGGCGCCAAACATGACGCGCGGCTTCGCTGTGTCGAGCGAGGCGCGGCTGG 660
QY 661 TGGCACCGGATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705
Db 661 TGGCACCGGATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705

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RESULT 12

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US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Geringas, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181

```

RESULT 13

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US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Geringas, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616

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; SOFTWARE: Fast-SEQ for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

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Query Match      99.8%; Score 703.4; DB 9; Length 705;
Best Local Similarity 99.9%; Pred. No. 4.9e-154;
Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCCGTGGCGG 60
Db 1 CCCAGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCCGTGGCGG 60
QY 61 CGATCAAGAGTTCCTTCGGCACCGACAGCTGTCCAGTTCATGGACCAAGAACACCCCG 120
Db 61 CGATCAAGAGTTCCTTCGGCACCGACAGCTGTCCAGTTCATGGACCAAGAACACCCCG 120
QY 121 TGTTCGGGGTCAACCAAGCGCGCTGTTCGGCGCTGGCGCGGTGTCTGTCCCGGG 180
Db 121 TGTTCGGGGTCAACCAAGCGCGCTGTTCGGCGCTGGCGCGGTGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGGTGGAGTCCCGAGCTGACCCCTGCCACTACGCGCGGATGTGCCCGA 240
Db 181 AGCGGCGCGGGTGGAGTCCCGAGCTGACCCCTGCCACTACGCGCGGATGTGCCCGA 240
QY 241 TCGAGACCCCGGAGGTCCTCAACATCGTCTGATCGGCTCGCTGTTCGCTGTATGCGCGG 300
Db 241 TCGAGACCCCGGAGGTCCTCAACATCGTCTGATCGGCTCGCTGTTCGCTGTATGCGCGG 300
QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGAAGGTGTGTCAGCGCGTGGTCAACG 360
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGAAGGTGTGTCAGCGCGTGGTCAACG 360
QY 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCAAGGTGTGTCAGCGCGTGGTCAACG 420
Db 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCAAGGTGTGTCAGCGCGTGGTCAACG 420
QY 421 CGCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCGGTTCGCGAGGCGCGGTTCGCGAGGCGG 480
Db 421 CGCGATCGACGACAAAGGCGCGTTTCGGGAGGCGCGGTTCGCGAGGCGCGGTTCGCGAGGCGG 480
QY 481 GCGAGTTCAGTACGTCCCTTCGTCAGAGTGGACTACATGACAGCTGTTCGCGCGCCAGA 540
Db 481 GCGAGTTCAGTACGTCCCTTCGTCAGAGTGGACTACATGACAGCTGTTCGCGCGCCAGA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGACGACGACGACGACG 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGACGACGACGACGACG 600
QY 601 TGATGGCGCCAAACATGACGCGCGGCTTCGCTGTGTCGAGCGAGGCGCGGCTGG 660
Db 601 TGATGGCGCCAAACATGACGCGCGGCTTCGCTGTGTCGAGCGAGGCGCGGCTGG 660
QY 661 TGGCACCGGATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705
Db 661 TGGCACCGGATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705

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; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-3

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 4.3e-152;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY      1   CCCAGGACGTGGAGGCGGATCACCGGAGACCCCTGATCAACATCCGTCACGTCGTGGCGG 60
DB      1   CCCAGGACGTGGAGGCGGATCACCGGAGACCCCTGATCAACATCCGTCCTCCGTCGTGGCGG 60

QY      61  CGATCAGGAGTTCCTTCCGACACGAGCAGCTGTCCCGAGTTCATCGACACAGAACCAACCCGC 120
DB      61  CGATCAAGGAGTTCCTTCCGACACGAGCAGCTGTCCCGAGTTCATCGATCCAGAACCAACCCGC 120

QY      121  TGTCCGGGCTCACCCACAAGCCCGCCTGTCTGGGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
DB      121  TGTCCGGGCTCACCCACAAGCCCGCCTGTCTGGGCGCTGGGCCCGGGTGTCTGTCCCGGG 180

QY      181  AGCGGGCCGGCTGGAGTCCGAGCTGCGAGCTGACCCGTCCCACTACGGCCGGATGTGCCCGA 240
DB      181  AGCGGGCCGGCTGGAGTCCGAGTCCGAGCTGCGAGCTGCAACCCGTCCCACTACGGCCGGATGTGCCCGA 240

QY      241  TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTCGCTGTATGCGCGGG 300
DB      241  TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTCGCTGTATGCGCGGG 300

QY      301  TCAACCCCTTCGGGTTTCATCGAGACGCCGTACCCGAAGTGTGTGAACGGCGTGTACCG 360
DB      301  TCAACCCCTTCGGGTTTCATCGAGACGCCGTACCCGAAGTGTGTGAACGGCGTGTACCG 360

QY      361  ACGAGATCCACTACTGACCCCGCAGGAGGACCGCACTGTGTGGCGGAGGCCAAT 420
DB      361  ACGAGATCCACTACTGACCCCGCAGGAGGACCGCACTGTGTGGCGGAGGCCAAT 420

QY      421  CGCCGATCGACGCAAGGGCCGGTTCGCGAGGCCCGGGTGTGTGTCCCGCAGAGCGG 480
DB      421  CGCCGATCGACGCAAGGGCCGGTTCGCGAGGCCCGGGTGTGTGTCCCGCAGAGCGG 480

QY      481  GCGAGGTGAGTACGTGCCCTCGTCGAGGTGGAATACATGAGAGTGTGCCCGGCCAGA 540
DB      481  GCGAGGTGAGTACGTGCCCTCGTCGAGGTGGAATACATGAGAGTGTGCCCGGCCAGA 540

QY      541  TGGTGTGGTGCCACCGGATGATCCCGTCTCTCGACACGACGACCAACCGTGTGCC 600
DB      541  TGGTGTGGTGCCACCGGATGATCCCGTCTCTCGACACGACGACCAACCGTGTGCC 600

QY      601  TGATGGGCCCAACATGCAKCGCAGCGGTTCCGCTGTGTGCGCAGCAGGCGCGCTGG 660
DB      601  TGATGGGCCCAACATGCAKCGCAGCGGTTCCGCTGTGTGCGCAGCAGGCGCGCTGG 660

QY      661  TGGGCACCGGCATGGAGCTGCGCGCGCGCATCGACGCGGCGAGT 705
DB      661  TGGGCACCGGCATGGAGCTGCGCGCGCGCATCGACGCGGCGAGT 705

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Db      601 TGATGGGCGCAACATGACGGCGGCTTCGGTGGTGGCGAGCGAGCGCGCTGG 660
Qy      661 TGGGCAACGGCATGGAGCTGGCGCGGCGATCGACGGCGGAGGT 705
Db      661 TGGGCAACGGCATGGAGCTGGCGCGGCGATCGACGGCGGAGGT 705

RESULT 15
US-09-285-306-10
; Sequence 10, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-10

Query Match      98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 3.7e-151;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

Qy      1 CCCAGGAGCTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTTCAGTCTGGGCGG 60
Db      1 CCCAGGAGCTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTTCAGTCTGGGCGG 60

Qy      61 CGATCAAGGAGTTCTTGGGCAACGCCAGCTGTCCAGTTTCATGGACCAGAACACCCGC 120
Db      61 CGATCAAGGAGTTCTTGGGCAACGCCAGCTGTCCAGTTTCATGGACCAGAACACCCGC 120

Qy      121 TGTGGGGCTCACCAACAGCGCGCTGTGGGGTGGGGTGGGGTGGGGTGGGGTGGGGTGGGGT 180
Db      121 TGTGGGGTGTGACCAACAGCGCGCTGTGGGGTGGGGTGGGGTGGGGTGGGGTGGGGTGGGG 180

Qy      181 AGCGGGCGGGCTGGAGTCCGACGTGACCGGTGACCGGTGACCGGTGACCGGTGACCGGTG 240
Db      181 AGCGGGCGGGCTGGAGTCCGACGTGACCGGTGACCGGTGACCGGTGACCGGTGACCGGTG 240

Qy      241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCTGCTGCTGCTGCTGCTG 300
Db      241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCTGCTGCTGCTGCTGCTG 300

Qy      301 TCAACCGGTTCCGGTTTCATCGAGCGCGGTACCGCAAGGTGGTTCGACGGCGTGGTCAACG 360
Db      301 TSAACCGGTTCCGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACGGGTGGTCAACG 360

Qy      361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCCACGTGGTGGTGGTGGTGGTGGTGGTGGT 420
Db      361 ACAGATCCACTACCTGACCGCGAGGAGGACCGCCACGTGGTGGTGGTGGTGGTGGTGGTGGT 420

Qy      421 CGCGGATCGACGACAAAGGGCCGGTTCCGGAGGCGCGGGTGGTGGTGGTGGTGGTGGTGGTGGT 480
Db      421 CGCGGATCGACGACAAAGGGCCGGTTCCGGAGGCGCGGGTGGTGGTGGTGGTGGTGGTGGTGGT 480

Qy      481 GCGAGGTCCAGTACGTGCGCTCGTCCAGTGGTACATGAGACGTGTGCGCGCGCAGA 540
Db      481 GCGAGGTCCAGTACGTGCGCTCGTCCAGTGGTACATGAGACGTGTGCGCGCGCAGA 540

Qy      541 TGGTGTGGTGGCGACCGGATGATCCCGTTCTTCGAGCACGACGACGACGACGACGACGACG 600
Db      541 TGGTGTGGTGGCGACCGGATGATCCCGTTCTTCGAGCACGACGACGACGACGACGACGACG 600

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Qy      601 TGATGGGCGCAACATGACGGCGGCTTCGGTGGTGGCGAGCGAGCGCGCTGG 660
Db      601 TGATGGGCGCAACATGACGGCGGCTTCGGTGGTGGCGAGCGAGCGCGCTGG 660
Qy      661 TGGGCAACGGCATGGAGCTGGCGCGGCGATCGACGGCGGAGGT 705
Db      661 TGGGCAACGGCATGGAGCTGGCGCGGCGATCGACGGCGGAGGT 705

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Search completed: August 20, 2004, 01:36:37
Job time : 409.972 secs

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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 12:36:51 ; Search time 66.4446 Seconds
(without alignments)
5888.223 Million cell updates/sec

Title: US-09-285-306-5

Perfect score: 705

Sequence: 1 ccaggacgtggaggcgatc.....ggcgatcgacggcgagct 705

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents, NA:*

- 1: /cgn2_6/ptodata/2/ina/5A_COMB.seq:*
- 2: /cgn2_6/ptodata/2/ina/5B_COMB.seq:*
- 3: /cgn2_6/ptodata/2/ina/6A_COMB.seq:*
- 4: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
- 5: /cgn2_6/ptodata/2/ina/PTUS_COMB.seq:*
- 6: /cgn2_6/ptodata/2/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	Sequence 24, Appl
3	603	85.5	4411529	3	Sequence 2, Appl
4	558.2	79.2	3447	2	US-09-103-840A-1
5	558.2	79.2	3447	3	Sequence 1, Appl
6	540.4	76.7	970	1	Sequence 57, Appl
7	540.4	76.7	970	1	Sequence 57, Appl
8	530.4	75.2	620	5	Sequence 1, Appl
9	530.4	75.2	620	2	Sequence 135, Appl
10	530.4	75.2	620	2	Sequence 135, Appl
11	530.4	75.2	620	4	Sequence 138, Appl
12	530.4	75.2	620	4	Sequence 135, Appl
13	530.4	75.2	620	4	Sequence 138, Appl
14	528.8	75.0	620	2	Sequence 135, Appl
15	528.8	75.0	620	2	Sequence 136, Appl
16	528.8	75.0	620	2	Sequence 137, Appl
17	528.8	75.0	620	2	Sequence 139, Appl
18	528.8	75.0	620	4	Sequence 136, Appl
19	528.8	75.0	620	4	Sequence 136, Appl
20	528.8	75.0	620	4	Sequence 137, Appl
21	528.8	75.0	620	4	Sequence 139, Appl
22	528.8	75.0	620	4	Sequence 140, Appl
23	528.8	75.0	620	4	Sequence 136, Appl
24	528.8	75.0	620	4	Sequence 137, Appl
25	528.8	75.0	620	4	Sequence 139, Appl
26	453.4	64.3	706	3	Sequence 140, Appl
27	371.2	52.7	4074	4	Sequence 25, Appl
					Sequence 4737, Ap

28	371.2	52.7	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
29	337.2	47.8	4083	4	US-09-489-039A-22	Sequence 22, Appl
30	337.2	47.8	4206	4	US-09-489-039A-30	Sequence 30, Appl
31	293.4	41.6	432	2	US-08-313-185-59	Sequence 59, Appl
32	293.4	41.6	432	3	US-09-082-614A-59	Sequence 59, Appl
33	286.2	40.6	324	4	US-08-750-088A-36	Sequence 36, Appl
34	286.2	40.6	324	4	US-09-722-319-36	Sequence 36, Appl
35	265.2	37.6	2964	4	US-09-540-236-1037	Sequence 1037, Ap
36	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
37	265.2	37.6	31063	4	US-09-596-002-20	Sequence 20, Appl
38	255.6	36.3	319	4	US-08-750-088A-35	Sequence 35, Appl
39	255.6	36.3	319	4	US-09-722-319-35	Sequence 35, Appl
40	249.8	35.4	11335	4	US-09-634-238-401	Sequence 401, App
41	244.4	34.7	14672	4	US-08-961-527-111	Sequence 111, App
42	244.4	34.7	1830121	4	US-09-557-884-1	Sequence 1, Appl
43	244.4	34.7	1830121	4	US-09-643-990A-1	Sequence 1, Appl
44	241.2	34.2	4143	4	US-09-328-352-4006	Sequence 4006, Ap
45	226.4	32.1	329	4	US-08-750-088A-34	Sequence 34, Appl

ALIGNMENTS

RESULT 1

US-08-797-812-24
; Sequence 24, Application US/08797812
; Patent No. 6228575
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas A.
; APPLICANT: Mack, David
; APPLICANT: Chee, Mark S.
; APPLICANT: Berno, Anthony J.
; APPLICANT: Stryer, Lubert
; APPLICANT: Ghandour, Ghassan
; APPLICANT: Wang, Ching
; TITLE OF INVENTION: Chip-Based Species Identification and
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/797,812
; FILING DATE: 07-FEB-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/017,765
; FILING DATE: 15-MAY-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/629,031
; FILING DATE: 08-APR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/012,631
; FILING DATE: 01-MAR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/011,339
; FILING DATE: 08-FEB-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Fitts, Renee A.
; REGISTRATION NUMBER: 35,136
; REFERENCE/DOCKET NUMBER: 16528X-018550
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-326-2400
; TELEFAX: 415-326-2422

; INFORMATION FOR SEQ ID NO: 24:									
; SEQUENCE CHARACTERISTICS:									
; LENGTH: 706 base pairs									
; TYPE: nucleic acid									
; STRANDEDNESS: single									
; TOPOLOGY: linear									
; MOLECULE TYPE: cDNA									
US-08-797-812-24									
Query Match 86.6%; Score 610.6; DB 3; Length 706;									
Best Local Similarity 91.6%; Pred. No. 8.1e-112; Indels 0; Gaps 0;									
Matches 646; Conservative 0; Mismatches 59;									
QY	1	CCGAGACGTGGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCACGTCTGTGGCGG	60						
DB	2	CCGAGACGTGGAGCGGATCACACCGCAGACGTTGATCAACATCCGCGCGGTGTGTCGCG	61						
QY	61	CGATCAAGGAGTTCTTCGGACACGACGAGCTGTCCAGTTCATCGACACGAGAACACCCGC	120						
DB	62	CGATCAAGGAGTTCTTCGGACACGACGAGCTGTCCAGTTCATCGACACGAGAACACCCGC	121						
QY	121	TGTCGGGGCTCACCCACAAGCGCGCCCTGTCCGGCGCTGGGCGCGGTGTCTGTCCCGGG	180						
DB	122	TGTCGGGGTTGACCCACAAGCGCGACTGTCCGGCTGGGCGCGGTGTCTGTCAAGTG	181						
QY	181	AGCGGGCGGGCTGGAGGTCGGGACAGTGACACCGTCCCACTACGGCCGGATGTGCCGA	240						
DB	182	AGCGTGCGGGGCTGGAGTCCGGACAGTGACACCGTCCCACTACGGCCGGATGTGCCGA	241						
QY	241	TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTGCGTGTATGCGCGG	300						
DB	242	TCGAAACCCCTGAGGGGCCAACATCGTCTGATCGGCTCGCTGTGCGTGTACGCGCGG	301						
QY	301	TCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGCAAGTGCGTGCACGGCGTGTACCG	360						
DB	302	TCAACCCGTTCCGGTTTCATCGAAACGCCGTACCGCAAGTGCGTGCACGGCGTGTAGCG	361						
QY	361	ACGAGATCCACTACTGACCGCCGACAGGAGGACCGCACGTGTGTGCGCAGGCGCACT	420						
DB	362	ACGAGATCGTGTACTGACCGCCGACAGGAGGACCGCACGTGTGTGCGCAGGCGCAAT	421						
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DB	422	CGCCGATCGATCGGACCGTTCGTTCTGTCGAGCGCGGTGTGTCGCCGCCAAGCGG	481						
QY	481	CGGAGGTGAGTACGTGCCCTCTGTCGAGGTGGACTATAGACGTGTGCGCGCGCCAGA	540						
DB	482	CGGAGGTGAGTACGTGCCCTCTGTCGAGGTGGACTATAGACGTGTGCGCGCGCCAGA	541						
QY	541	TGGTGTCCGTGCGCCACCGCATGATCCCGTTCCTCGAGCACGACGACCAACCGTGCC	600						
DB	542	TGGTGTCCGTGCGCCACCGCATGATTCCTTCTCGAGCACGACGACCAACCGTGCC	601						
QY	601	TGATGGCGCCAAACATGACGCGCCAGCGGTTCCCGTGTGTGCGAGCGGCGCGCTGG	660						
DB	602	TCATGGGGCAACATGACGCGCCAGCGGTGCCGTGTGTGCGTGTGCGAGCGGCGCGCTGG	661						
QY	661	TGGGACCGCGATGAGCTGCCGCGGCATCGACGCGCGCAGCT	705						
DB	662	TGGGACCGCGATGAGCTGCCGCGGCATCGACGCGCGCAGCT	706						
RESULT 2									
US-09-103-840A-2									
; Sequence 2, Application US/09103840A									
; Patent No. 6294328									
; GENERAL INFORMATION:									
; APPLICANT: FLEISCHMAN, Robert D.									
; APPLICANT: WHITE, Owen R.									
; APPLICANT: FRASER, Claire M.									
; APPLICANT: VENTER, John C.									
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM TUBERCULOSIS									

RESULT 4
US-08-313-185-57

Query Match	79.2%;	Score 558.2;	DB 2;	Length 3447;
Best Local Similarity	87.4%;	Pred. No. 1.7e-101;		
Matches 611;	Conservative 0;	Mismatches 88;	Indels 0;	Gaps 0;
QY	1	CCGAGCGTGGAGGCGATCA	CACGCGCAGACCGCTGATCAACATCCGTC	CCAGTCGTTGCGCGG 60
Db	1124	CCGAGGCGTGGAGGCGATCA	CGCGCAGACCGCTGATCAATATCCGTC	CGTGGTGGCGCG 1183
QY	61	CGATCAAGAGGTTCTTGGC	ACACGCCAGCTGTCCAGTTCATGGACCAACAAACCCGC	120
Db	1184	CTATCAAGGAATTCTTGGC	ACCACCGACGCTGCGAGTTCAATGATCAGAACAAACCCCTC	1243
QY	121	TGTCGGGCGCTACCCACA	AGCGCCGCTGTGCGCGCTGGGCCCGCGGTGTCTGTCCCGGG	180
Db	1244	TGTCGGGCGCTACCCACA	AGCGCCGCGGTGTGCGCGCTGGGCCCGCGGTGTTGTGCGGTG	1303
QY	181	AGCGGCGCGGCTGGAGGT	CCGCGACGTGCACCGTCCCACTACGCGCGGATGTGCCCGA	240
Db	1304	AGCGTCCGCGCTAGAGGT	CCGTCGCTGATCGGCTCGGTGTGCGGTGTTACGGCGGG 300	
QY	241	TCGAGACCCCGAGGGTCC	CAACATCGTCTGTGATCGGCTCGGTGTGCGGTGTTACGGCGGG 1423	
Db	1364	TCGAGACTCCGAGGGGCC	CAACATAGGTCTGTGATCGGTTCAATGTCGGTGTACGCGCGGG	
QY	301	TCAACCGGTTCCGGGTT	CAATCGAGACCGCGTACCAGAGGTGGTCAACGGCGTGGTACCG 360	
Db	1424	TCAACCCCTTCGGGTT	CAATCGAAACACCGTACCAGAGGTGGTGTGACGGTGTGTCAGCG 1483	

361 ACAGATCCACTACCTGACCGCCGACGAGGAGGACCGCCACGTCGTGTGGCGGAGGCCAACT 420
1484 ACAGATCGAATCTTACCGCTGACGAGGAAGACCGCCATGTCTGTGGCGGAGGCCAACT 1543
421 CGCCGATCGACGACGAGGCGGCTGCGGAGGCGGCGGTGCTGTCCGCGCGCAAGGCGG 480
1544 CGCCGATCGACGAGGCGGCGGCTTCTCGAGCGGCGGCTTGTGGGTGCGCCCAAGGCGG 1603
481 CGGAGGTGAGTACGTCGCTCGTCCGAGGTGGACTACATGACGCTGTGCGCGCCGACGAG 540
1604 GCGAGGTGAGTACGTCGCTCGTCCGAGGTGGACTACATGATGTCTGCGCCGACGAG 1663
541 TGGTGTGCGGTGCGCCACCGGATGATCCGTTCTCGAGCACGACGACGACCGTGGCC 600
1664 TGGTGTGCGGTGCGCCACCGGATGATCCGTTCTCGAGCACGACGACGACCGTGGCC 1723
601 TGATGGCGCCCAACATGACGCGGCGGCTGCGGTGCGGTGCGGAGGCGCGCTGG 660
1724 TGATGGCGCGCTAACATGACGCGGCGGCTGCGGTGCGGTGCGGAGGCGCGCTGG 1783
661 TGGGACCGCGCATGAGCTGCGCGCGGCGGATCGACGCGG 699
1784 TGGTACCGGTATGAGTTGCGCGCGGCGGCTGACGCGTG 1822

RESULT 5
US-09-082-614A-57
; Sequence 57, Application US/09082614A
; Patent No. 6124098
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; FILING DATE:
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/313,185
; FILING DATE: 12-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single

TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-09-082-614A-57
Query Match 79.2%; Score 558.2; DB 3; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.7e-101;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;
1 CCCAGGAGTGGAGGCGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTCGGGG 60
1124 CCCAGGAGTGGAGGCGGATCACACCGCAGACCCCTGATCAATATCCGTCGTCGGTCGCG 1183
61 CGATCAAGAGTTCCTTCGGCACCCAGCCAGCTTCCTCCAGTTCATGACACAGAACACCCGC 120
1184 CTATCAAGAAATTCCTTCGGCACCCAGCCAGCTTCCTCCAGTTCATGATCAGAACACCCCTC 1243
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1244 TGTGCGGGGTACCCACAAAGCCCGCTGTCGGCCCTGGCCCGGCTGTCGTCTGTCGCCGG 1303
181 AGCGGCGCGGGTTCGAGGTCCGCGACGTGCACACCCCTGCCACTACGCGCCGATGTCGCCGA 240
1304 AGCGTCCCGGGTTCGAGGTCCGCGACGTGCACACCCCTGCCACTACGCGCCGATGTCGCCGA 1363
241 TCGAGACCCCGGAGGTCCCAACATCGTCTGATCGGCTCGCTGTCGTCGTCGTCGTCGTCG 300
1364 TCGAGACTCCGGAGGCGCCCAACATAGTCTGATCGGTTTCATTCGCTGTCGTCGTCGTCG 1423
301 TCACCCGTCGCGTTCATCGAGACCGCTACCGCAAGTTCGTCGACGCGGCTGTCACCG 360
1424 TCACCCCTTCGCGTTCATCGAAACACCGTACCGCAAGTTCGTCGTCGTCGTCGTCGTCG 1483
361 ACAGATCCACTACCTGACCGCGACGAGGAGGACCGCCACGTCGTCGTCGTCGTCGTCGTCG 420
1484 ACAGATCGAATCTTGAACGCTGACGAGGAGGACCGCCATGTCGTCGTCGTCGTCGTCGTCG 1543
421 CGCCGATCGACGACAAAGGCGCGGTCGCGAGGCGCGGTCGTCGTCGTCGTCGTCGTCGTCG 480
1544 CGCCGATCGACGAGGCGCGGTCGTCGAGGCGCGGTCGTCGTCGTCGTCGTCGTCGTCGTCG 1603
481 GCGAGTTCGAGTACGTCGCTCGTCGAGGTGACATACGAGTTCGTCGTCGTCGTCGTCGTCG 540
1604 GCGAGTTCGAGTACGTCGCTCGTCGAGGTGATTCATGATGATGATGATGATGATGATGATG 1663
541 TGGTGTGCGTGGCCACCGCGGATGATCCGTTCTCGAGCACGACGACGACGACGACGACGACG 600
1664 TGGTGTGCGTGGCCACCGCGGATGATTCGTTCTTGGAGCACGACGACGACGACGACGACG 1723
601 TGATGGCGCCCAACATGACGCGGCGGCTGCGCTGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660
1724 TGATGGCGCGCTAACATGACGCGGCGGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 1783
661 TGGCACCGGATGAGCTGCGCGCGGCGGATCGACGCGG 699
1784 TGGGTACCGGTATGAGTTGCGCGCGGCGGCTGACGCGTG 1822

RESULT 6
US-08-250-030-1
; Sequence 1, Application US/08250030
; Patent No. 5643723
; GENERAL INFORMATION:
; APPLICANT: Persing, David H.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in
; TITLE OF INVENTION: Clinical Specimens
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA

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; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/250,030
; FILING DATE: 26-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Muehling, Ann M.
; REGISTRATION NUMBER: 33,977
; REFERENCE/DOCKET NUMBER: 150.105US1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-0361
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
US-08-250-030-1

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Query Match      76.7%; Score 540.4; DB 1; Length 970;
Best Local Similarity 91.1%; Pred. No. 5.1e-98;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 1 CCCAGGAGTGGAGGATCAACCGGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 1 |||||
QY 341 CCCAGGAGTGGAGGATCAACCGGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 400
Db 341 |||||
QY 61 CGATCAAGAGTTCCTCGGCACCGAGCTGTCCAGTTCATGACAGAAACACCGC 120
Db 61 |||||
QY 401 CGATCAAGAGTTCCTCGGCACCGAGCTGTCCAGTTCATGACAGAAACACCGC 460
Db 401 |||||
QY 121 TGTGGGGCTCACCCACAAAGCGCCCTGTGGGCTGTGGGCTGTGGGCTGTGTCACGTG 180
Db 121 |||||
QY 461 TGTGGGGCTGTGGGCTGTGGGCTGTGGGCTGTGGGCTGTGTCACGTG 520
Db 461 |||||
QY 181 AGCGGGCGGGTGTGGAGTTCGAGAGCGCGGTACCGCAAGGTGGTACCGAGGTGGTACCGG 240
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QY 241 TCGAGAGCCCGGAGGTTCGAGAGCGCGGTACCGCAAGGTGGTACCGAGGTGGTACCGG 300
Db 241 |||||
QY 581 TCGAGAGCCCGGAGGTTCGAGAGCGCGGTACCGCAAGGTGGTACCGAGGTGGTACCGG 640
Db 581 |||||
QY 121 TGTGGGGCTCACCCACAAAGCGCGCTGTGGGCTGTGGGCTGTGGGCTGTGTCACGTG 180
Db 121 |||||
QY 461 TGTGGGGCTGTGGGCTGTGGGCTGTGGGCTGTGGGCTGTGTCACGTG 520
Db 461 |||||
QY 181 AGCGGGCGGGTGTGGAGTTCGAGAGCGCGGTACCGCAAGGTGGTACCGAGGTGGTACCGG 240
Db 181 |||||
QY 521 AGCGGGCGGGTGTGGAGTTCGAGAGCGCGGTACCGCAAGGTGGTACCGAGGTGGTACCGG 580
Db 521 |||||
QY 241 TCGAGAGCCCGGAGGTTCGAGAGCGCGGTACCGCAAGGTGGTACCGAGGTGGTACCGG 300
Db 241 |||||
QY 581 TCGAGAGCCCGGAGGTTCGAGAGCGCGGTACCGCAAGGTGGTACCGAGGTGGTACCGG 640
Db 581 |||||
QY 301 TCAACCCGTTGGGTTTCATCGAGAGCGCGGTACCGCAAGGTGGTACCGAGGTGGTACCGG 360
Db 301 |||||
QY 641 TCAACCCGTTGGGTTTCATCGAGAGCGCGGTACCGCAAGGTGGTACCGAGGTGGTACCGG 700
Db 641 |||||
QY 361 ACAGATCCACTACCTGACCGCGGAGGAGGACCGCCAGCTGTGGGCGAGGCCAACT 420
Db 361 |||||
QY 701 ACAGATCCACTACCTGACCGCGGAGGAGGACCGCCAGCTGTGGGCGAGGCCAACT 480
Db 701 |||||
QY 421 CGCGGATCGAGAGCAAGGCGCGGTTCGCGAGGCGCGGCTGTGGTTCGCGGCAAGCGG 480
Db 421 |||||
QY 761 CGCGGATCGAGAGCAAGGCGCGGTTCGCGAGGCGCGGCTGTGGTTCGCGGCAAGCGG 820
Db 761 |||||
QY 481 GCAGAGTCGAGTACGTGCTTCGCGAGGTCGAGTACGAGTACGAGTACGAGTACGAGTACGAG 540
Db 481 |||||
QY 821 GCAGAGTCGAGTACGTGCTTCGCGAGGTCGAGTACGAGTACGAGTACGAGTACGAGTACGAG 580
Db 821 |||||
QY 541 TGTGTGGTGGGACCGCGATGATCCGTTCTCGAGGACGAGGACCGCAACCGTGGCC 600
Db 541 |||||
QY 881 TGTGTGGTGGGACCGCGATGATCCGTTCTCGAGGACGAGGACCGCAACCGTGGCC 630
Db 881 |||||
QY 601 TGTGTGGTGGGACCGCGATGATCCGTTCTCGAGGACGAGGACCGCAACCGTGGCC 630
Db 601 |||||
QY 941 TGTGTGGTGGGACCGCGATGATCCGTTCTCGAGGACGAGGACCGCAACCGTGGCC 940
Db 941 |||||

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RESULT 7
PCT-US95-06790-1
; Sequence 1, Application PC/TUS9506790
; GENERAL INFORMATION:
; APPLICANT: Mayo Foundation for Medical Education and Research
; APPLICANT: and Hoffmann-La Roche Inc.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: PCT/US95/06790
; FILING DATE: 26-MAY-1995
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Raasch, Kevin W.
; REGISTRATION NUMBER: 35,651
; REFERENCE/DOCKET NUMBER: 150.105WO1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-339-0331
; TELEFAX: 612-339-0361
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 970 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA
PCT-US95-06790-1

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Query Match      76.7%; Score 540.4; DB 5; Length 970;
Best Local Similarity 91.1%; Pred. No. 5.1e-98;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 1 CCCAGGAGTGGAGGATCAACCGGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 1 |||||
QY 341 CCCAGGAGTGGAGGATCAACCGGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 400
Db 341 |||||
QY 61 CGATCAAGAGTTCCTCGGCACCGAGCTGTCCAGTTCATGACAGAAACACCGC 120
Db 61 |||||
QY 401 CGATCAAGAGTTCCTCGGCACCGAGCTGTCCAGTTCATGACAGAAACACCGC 460
Db 401 |||||
QY 121 TGTGGGGCTCACCCACAAAGCGCGCTGTGGGCTGTGGGCTGTGGGCTGTGTCACGTG 180
Db 121 |||||
QY 461 TGTGGGGCTGTGGGCTGTGGGCTGTGGGCTGTGGGCTGTGTCACGTG 520
Db 461 |||||
QY 181 AGCGGGCGGGTGTGGAGTTCGAGAGCGCGGTACCGCAAGGTGGTACCGAGGTGGTACCGG 240
Db 181 |||||
QY 521 AGCGGGCGGGTGTGGAGTTCGAGAGCGCGGTACCGCAAGGTGGTACCGAGGTGGTACCGG 580
Db 521 |||||
QY 241 TCGAGAGCCCGGAGGTTCGAGAGCGCGGTACCGCAAGGTGGTACCGAGGTGGTACCGG 300
Db 241 |||||
QY 581 TCGAGAGCCCGGAGGTTCGAGAGCGCGGTACCGCAAGGTGGTACCGAGGTGGTACCGG 640
Db 581 |||||
QY 301 TCAACCCGTTGGGTTTCATCGAGAGCGCGGTACCGCAAGGTGGTACCGAGGTGGTACCGG 360
Db 301 |||||
QY 641 TCAACCCGTTGGGTTTCATCGAGAGCGCGGTACCGCAAGGTGGTACCGAGGTGGTACCGG 700
Db 641 |||||
QY 361 ACAGATCCACTACCTGACCGCGGAGGAGGACCGCCAGCTGTGGGCGAGGCCAACT 420
Db 361 |||||

```


SEQUENCE CHARACTERISTICS:
 LENGTH: 620 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 US-08-757-653-138

Query Match 75.2%; Score 530.4; DB 2; Length 620;
 Best Local Similarity 91.0%; Pred. No. 4.6e-96;
 Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTGTGCGCGGATCAAGAGATCTTCGGACCAAGCCAGCTGTCC 95
 Db |||||
 QY 620 ATCAACATCCGCGCGGTGTGCGCGGATCAAGAGATCTTCGGACCAAGCCAGCTGTCC 561
 Db |||||
 QY 96 CAGTTTCATGGACCAAGCAACCCGCTGTGCGGCTACCCAAAGCGCGCTGTGCGCG 155
 Db |||||
 QY 560 CAATTTCATGGACCAAGCAACCCGCTGTGCGGCTTACCCAAAGCGCGCTGTGCGCG 501
 Db |||||
 QY 156 CTGGCGCGCGGTGTGCTGTCCCGGAGCGCGCGGCTGGAGTCCGGACGTCACCG 215
 Db |||||
 QY 500 CTGGCGCGCGGTGTGCTGTACGTCAGTGTGCGGCTGGAGTCCGGACGTCACCG 441
 Db |||||
 QY 216 TCCCACTACGCGCGGATGTGCCGATCGAGACCCCGGAGGTCCCAACATCGTCTGATC 275
 Db |||||
 QY 440 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 381
 Db |||||
 QY 276 GGCTCGCTGTGCTGTATGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 335
 Db |||||
 QY 380 GGCTCGCTGTGCTGTATGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 321
 Db |||||
 QY 336 AAGTGTGTGCGCGCGGTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 395
 Db |||||
 QY 320 AAGTGTGTGCGCGCGGTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 261
 Db |||||
 QY 396 CGCACGACGCGCGGTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 455
 Db |||||
 QY 260 CGCACGACGCGCGGTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 201
 Db |||||
 QY 456 CGGTGTGTGCTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 515
 Db |||||
 QY 200 CGGTGTGTGCTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 141
 Db |||||
 QY 516 TACATGACGCTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 575
 Db |||||
 QY 140 TACATGACGCTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 81
 Db |||||
 QY 576 GAGCAGACGCGCGGTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 635
 Db |||||
 QY 80 GAGCAGACGCGCGGTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 21
 Db |||||
 QY 636 CTGGTGTGCGCGCGGTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 655
 Db |||||
 QY 20 CTGGTGTGCGCGCGGTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 1

RESULT 10

US-08-520-946-135

Sequence 135, Application US/08520946

Patent No. 6372424

GENERAL INFORMATION:

APPLICANT: BROW, MARY ANN D.

APPLICANT: LYAMICHEV, VICTOR I.

APPLICANT: OLIVE, DAVID M.

TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

TITLE OF INVENTION: PATHOGENS

NUMBER OF SEQUENCES: 160

CORRESPONDENCE ADDRESS:

ADDRESSEE: MEDLEN & CARROLL

STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO

STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA
 ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent In Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/520,946

FILING DATE:

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: CARROLL, PETER G.

REGISTRATION NUMBER: 32,837

REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 135:

SEQUENCE CHARACTERISTICS:

LENGTH: 620 base pairs

TYPE: nucleic acid

STRANDEDNESS: double

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

US-08-520-946-135

Query Match

Best Local Similarity 91.0%; Score 530.4; DB 4; Length 620;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTGTGCGCGGATCAAGAGATCTTCGGACCAAGCCAGCTGTCC 95
 Db |||||
 QY 1 ATCAACATCCGCGCGGTGTGCGCGGATCAAGAGATCTTCGGACCAAGCCAGCTGTCC 60
 Db |||||
 QY 96 CAGTTTCATGGACCAAGCAACCCGCTGTGCGGCTACCCAAAGCGCGCTGTGCGCG 155
 Db |||||
 QY 61 CAATTTCATGGACCAAGCAACCCGCTGTGCGGCTTACCCAAAGCGCGCTGTGCGCG 120
 Db |||||
 QY 156 CTGGCGCGCGGTGTGCTGTCCCGGAGCGCGCGGCTGGAGTCCGGACGTCACCG 215
 Db |||||
 QY 121 CTGGCGCGCGGTGTGCTGTACGTCAGTGTGCGGCTGGAGTCCGGACGTCACCG 180
 Db |||||
 QY 216 TCCCACTACGCGCGGATGTGCCGATCGAGACCCCGGAGGTCCCAACATCGTCTGATC 275
 Db |||||
 QY 181 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 240
 Db |||||
 QY 276 GGCTCGCTGTGCTGTATGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 335
 Db |||||
 QY 241 GGCTCGCTGTGCTGTATGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 300
 Db |||||
 QY 336 AAGTGTGTGCGCGCGGTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 395
 Db |||||
 QY 301 AAGTGTGTGCGCGCGGTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 360
 Db |||||
 QY 396 CGCACGACGCGCGGTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 455
 Db |||||
 QY 361 CGCACGACGCGCGGTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 420
 Db |||||
 QY 456 CGGTGTGTGCTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 515
 Db |||||
 QY 421 CGGTGTGTGCTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 480
 Db |||||
 QY 516 TACATGACGCTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 575
 Db |||||
 QY 481 TACATGACGCTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 540
 Db |||||
 QY 576 GAGCAGACGCGCGGTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 635
 Db |||||
 QY 541 GAGCAGACGCGCGGTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 600
 Db |||||
 QY 636 CTGGTGTGCGCGCGGTGTGCTGTGCGCGGTCAACCGGTTCGCGTTCATCGACGCGGTACCG 655
 Db |||||

Db 601 CTGCTCGTAGCGAGGCCCC 620

RESULT 11

US-08-520-946-138/c

Sequence 138, Application US/08520946

Patent No. 6372424

GENERAL INFORMATION:

APPLICANT: BROW, MARY ANN D.

APPLICANT: LYAMICHEV, VICTOR I.

APPLICANT: OLIVE, DAVID M.

TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

TITLE OF INVENTION: PATHOGENS

NUMBER OF SEQUENCES: 160

CORRESPONDENCE ADDRESS:

ADDRESSEE: MEDLEN & CARROLL

STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO

STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA

ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent in Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/520,946

FILING DATE:

CLASSIFICATION: 435

ATTORNEY/AGENT INFORMATION:

NAME: CARROLL, PETER G.

REGISTRATION NUMBER: 32,837

REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 138:

SEQUENCE CHARACTERISTICS:

LENGTH: 620 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

US-08-520-946-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 4,6e-96;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0

QY	36	ATCAACATCCGTCACGATCGTGGCGGCGATCAAGGAGTTCTTCGGCACCGACAGTGTC	95
Db	620	ATCAACATCGGCGGTGTGCGCGGATCAAGGAGTTCTTCGGCACCGACAGTGTCGAGC	561
QY	96	CAGTTTCATGGACACAGAACACCGCTGTGCGGGCTCACCCACAGGCGCGCTGTTCGGCG	155
Db	560	CAATTTCAGACACAGAACACCGCTGTGCGGGTTGACCCACAGCGCGCATGTGCGGCG	501
QY	156	CTGGGCGCGGTGTGTCTGTCGGGAGCGGCGGGCTCGAGTCCGACAGTGACACCG	215
Db	500	CTGGGCGCGGTGTGTCTGTCGGGAGCGGCGGGCTCGAGTCCGACAGTGACACCG	441
QY	216	TCCCACTACGGCGCGATGTGCCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGTATC	275
Db	440	TGCACTACGGCGCGATGTGCCCGATCGAAACCCCTGAGGGGCCAACATCGGTCTGTATC	381
QY	276	GGCTCGGTGTGCGGTATCGCGGGTCAACCGGTTCGGGTTCATCGAGACGCGTACCGC	335
Db	380	GGCTCGGTGTGCGGTATCGCGGGTCAACCGGTTCGGGTTCATCGAAACGCGGTACCGC	321
QY	336	AAGTGTTCACGGCGTGTTCACGAGAGATCCACTACTGACCGCCGACGAGGAGGAC	395
Db	320	AAGTGTTCACGGCGTGTTCAGGAGATGTGTACTGACCGCGAGGAGGAGGAC	261

QY 96 CAGTTTCATGACAGCAACACCGCTGTGCGGGTCAACCAAGCGCCGCTGTGCGG 155
Db 61 CAATTTCATGACAGCAACACCGCTGTGCGGGTGAACCAAGCGCCGCTGTGCGG 120
QY 156 CTGGGCGCGGGTGTGTGTCGCGGAGCGCGCGGGTGGAGGTCCGCGACGTGCAACCG 215
Db 121 CTGGGCGCGGGTGTGTGTCGCGGAGCGGTGCGGGTGGAGGTCCGCGACGTGCAACCG 180
QY 216 TCCACTACGCGCGGATGTCGCGGATCGAGACCCCGGAGGTCCCAATCGCTCTGATC 275
Db 181 TCGACTACGCGCGGATGTCGCGGATCGAGAACCCCTGAGGGGCCAACAATCGCTCTGATC 240
QY 276 GGCTCGCTCTCGGTGTATGCGCGGGTCAACCCGCTTCGGGTTTCATCGAGCGCGTACCGC 335
Db 241 GGCTCGCTCTCGGTGTATGCGCGGGTCAACCCGCTTCGGGTTTCATCGAGAACCCGTTACCGC 300
QY 336 AAGGTGTCGACGCGGTGTGTACCGACGAGATCGTGTACTGACCGCGCGAGGAGGAC 395
Db 301 AAGGTGTCGACGCGGTGTGTACCGACGAGATCGTGTACTGACCGCGCGAGGAGGAC 360
QY 396 CGCCAGCTGTCGCGGAGCGCAACTCGCGGATCGAGCAAGGGCGCGGTTCGCGGAGGCG 455
Db 361 CGCCAGCTGTCGCGGAGCGCAACTCGCGGATCGAGCAAGGGCGCGGTTCGCGGAGGCG 420
QY 456 CGGGTGTGTCGCGGAGCGCAACTCGCGGATCGAGTGTGTCGCGGATCGAGTGTGTCGCGG 515
Db 421 CGGGTGTGTCGCGGAGCGCAACTCGCGGATCGAGTGTGTCGCGGATCGAGTGTGTCGCGG 480
QY 516 TACATGGAGGTGTCGCGGAGCGCAACTCGCGGATCGAGTGTGTCGCGGATCGAGTGTGTCGCGG 575
Db 481 TACATGGAGGTGTCGCGGAGCGCAACTCGCGGATCGAGTGTGTCGCGGATCGAGTGTGTCGCGG 540
QY 576 GAGCAGCAGCGCAACCGTCCCTGATGGCGGCAACATCGAGCGCGCGGTTCGCGGAGGTCG 635
Db 541 GAGCAGCAGCGCAACCGTCCCTGATGGCGGCAACATCGAGCGCGCGGTTCGCGGAGGTCG 600
QY 636 CTGTTGCGCAGCGAGGCGCC 655
Db 601 CTGTTGCGCAGCGAGGCGCC 620

RESULT 13

US-09-655-378A-138/c

; Sequence 138, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; LYAMICHEV, VICTOR I.

; OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 138:

US-09-655-378A-138

Query Match

Best Local Similarity 75.2%; Score 530.4; DB 4; Length 620;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCGGTCCAGTCTGTGGCGGCGATCAAGGATTTCTTGGCACCAAGCCAGCTGTGC 95
Db 620 ATCAACATCGGTCCAGTCTGTGGCGGCGATCAAGGATTTCTTGGCACCAAGCCAGCTGTGC 561
QY 96 CAGTTTCATGACAGCAACACCGCTGTGCGGGTCAACCAAGCGCGCTGTGCGG 155
Db 560 CAATTTCATGACAGCAACACCGCTGTGCGGGTCAACCAAGCGCGCTGTGCGG 501
QY 156 CTGGGCGCGGGTGTGTGTCTGTCGCGGAGCGGCGCGGTTCGCGGATCGAGTGTGCGG 215
Db 500 CTGGGCGCGGGTGTGTGTCTGTCACGTGAGCGTGTGCGGGTGTGAGGTTCGCGG 441
QY 216 TCCCACTACGCGCGATGTGCGCGATCGAGACCCCGGAGGTCCCAACATCGGTCTGATC 275
Db 440 TCGCACTACGCGCGATGTGCGCGATCGAGACCCCGTGAACACCCCTGAGGGGCCAACA 381
QY 276 GGCTCGCTGTGCGGTGTATGCGCGGTCAACCGTTCGCGGTTTCATCGAGACGCGGTAC 335
Db 380 GGCTCGCTGTGCGGTGTATGCGCGGTCAACCGTTCGCGGTTTCATCGAGACGCGGTAC 321
QY 336 AAGGTGTCGACGCGGTGTGTGTCACCGACGAGATTCACCTACCTGACCGCGCGGTTCGCG 395
Db 320 AAGGTGTCGACGCGGTGTGTGTCACCGACGAGATTCGTTAGCGACGAGATTCGTTAG 261
QY 396 CGCCAGCTGTGTCGCGCGAGCGCAACTCGCGGATCGAGCAAGGGCGCGGTTCGCGAGG 455
Db 260 CGCCAGCTGTGTCGCGCGAGCGCAACTCGCGGATTCGCGGATTCGCGGATTCGCGG 201
QY 456 CGGTGTCGTGTCGCGCGAGCGCGGAGGTTCGAGTACGTGCGCTCGTCCGAGGTGAC 515
Db 200 CGGTGTCGTGTCGCGCGAGCGCGGAGGTTCGAGTACGTGCGCTCGTCTGAGGTGAC 141
QY 516 TACATGGAGGTGTGCGCGCGCGAGATGTTGTCGTTGCGGCGCACCGGATGATCCCGTTC 575
Db 140 TACATGGAGGTGTGCGCGCGCGAGATGTTGTCGTTGCGGCGCACCGGATGATTCCTTC 81
QY 576 GAGCACGACGACGCAACCGTCCCTGATGGCGCGCCCAACATGCGAGCGCCAGGCGTTC 635
Db 80 GAGCACGACGACGCAACCGTCCCTGATGGCGCGCCCAACATGCGAGCGCCAGGCGTTC 21
QY 636 CTGTTGCGCAGCGAGGCGCC 655
Db 20 CTGTTGCGCAGCGAGGCGCC 1

RESULT 14

US-08-757-653-136

; Sequence 136, Application US/08757653

; Patent No. 5843669

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

; APPLICANT: Lyamichev, Victor I.

; APPLICANT: Lyamichev, Natasha

; TITLE OF INVENTION: Cleavage of Nucleic Acid Using

; TITLE OF INVENTION: Thermolabile FEN-1 Endonucleases

; NUMBER OF SEQUENCES: 190

```

CORRESPONDENCE ADDRESS:
ADDRESS: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 136:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-136

Query Match          75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 9.4e-96;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCAGTCGTGGGGCGGATCAAGAGGTCTTCGGCACCAGCAGCTGCC 95
Db 1 ATCAACATCCGCGCGGTGGTCGCGCGGATCAAGAGGTCTTCGGCACCAGCAGCTGAGC 60

Qy 96 CAGTTTCATGGACCAAGAACACCCCGTGTGGGGCTCACCCACAAGCGCGCGCTGTGCGCG 155
Db 61 CAATTTCATGGACCAAGAACACCCCGTGTGGGGTTGACTACAGCGCGGACTGTGCGCG 120

Qy 156 CTGGCGCCCGGTGGTCTCTCTCCGGGAGCGGGCGGGCTGGAGGTCGCGACGTGACCCG 215
Db 121 CTGGGCGCCCGGGTCTCTCAGTCGAGCGTGC CGGGCTGGAGGTCGCGACGTGACCCG 180

Qy 216 TCCCACTACGCGCGGATGTGCCCGATCGAGACCCCGGAGGTCCTCCAAATCGGTCGTGATC 275
Db 181 TCGCACTACGCGCGGATGTGCCCGATCGAAAAATCCCTGAGGGGCCCAATCATCGGTCGTGATC 240

Qy 276 GGCTCGCTGTGGTGTATGTCGCGGGTCAACCGTTTCGGGTTTCATCGACGCGCGTACCGC 335
Db 241 GGCTCGCTGTGGTGTATGTCGCGGGTCAACCGTTTCGGGTTTCATCGAAACGCGGTACCGC 300

Qy 336 AAGGTGGTCGACGCGGCTGTCTACCGACGAGATCCCACTACCTGACCGCGGACGAGGAGAC 395
Db 301 AAGGTGGTCGACGCGGCTGTCTAGCGACGAGATCGTGTACTCGCGCGGACGAGGAGAC 360

Qy 396 CGCCACGTGGTGGCGGAGGCGCACTCGCGCATCGACGACAAAGGGCGGTTTCGCGGAGGCC 455
Db 361 CGCCACGTGGTGGGCAAGGCGCAATTCGCGCGATCGATGCGGACGCGTTCGTGCGAGCGCG 420

Qy 456 CGGGTGTGGTTCGCGCGCAAGCGCGGAGGTCGAGTACGTGCGCTTCGTCCGAGGTGGAC 515
Db 421 CGCGTGTGGTTCGCGCGCAAGCGCGGAGGTCGAGTACGTGCGCTTCGTCTGAGGTGGAC 480

Qy 516 TACATGGACGTGTGCGCGCGCCAGATGGTGTGGGTGGCCACCGCATGATCCCGTTCCTC 575
Db 481 TACATGGACGTCTCGCGCGCCAGATGGTGTGGGTGGCCACCGCATGATTCCTTCTCTG 540

Qy 576 GAGCAGCAGACGCGCAACCGTGCCTGTATGGGGGCCCAATCATGACGCGCGAGGGGTTCGG 635

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Db      241 GGCTCGTGTGCGGTAGCGCGGGTCAACCCGTTGCGGTTATCGAAACGCCGTACCGC 300
QY      336 AAGTGTGTCGACGCGGTGTCACCGACGAGATCCACTACCTGACCGCGGACGAGGAC 395
Db      301 AAGTGTGTCGACGCGGTGTTAGCGACGAGATGTTGTTACCTGACCGCGGACGAGGAC 360
QY      396 CGCCACGTGTGCGGCGAGGCGCACTGCCGATCGACGACAAGGCGCGGTTTCGCGGAGGCC 455
Db      361 CGCCACGTGTGCGGCGAGGCGCAATTCGCCGATCGATCGCGACGGTCCGTCGAGCCG 420
QY      456 CGGTTGCTGTCGCGCGCAAGCGGCGAGGTGAGTACGTGCTGTCGAGGTTGGAC 515
Db      421 CGGTTGCTGTCGCGCGCAAGCGGCGAGGTGAGTACGTGCTGTCGAGGTTGGAC 480
QY      516 TACATGACGTGTGCGCGCGCCAGATGTTGTCGTTGGCCACCGCGATGATCCCGTTCCCTC 575
Db      481 TACATGACGTGTGCGCGCGCCAGATGTTGTCGTTGGCCACCGCGATGATCCCGTTCCCTC 540
QY      576 GAGCAGGACGCGCAACCGTGTGTCGTTGGCCACCGCGATGATCCCGTTCCCTC 635
Db      541 GAGCAGGACGCGCAACCGTGTGTCGTTGGCCACCGCGATGATCCCGTTCCCTC 600
QY      636 CTGGTGGCGAGCGAGCGCC 655
Db      601 CTGGTGGCGAGCGAGCGCC 620

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 Job time : 79.4446 secs

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GenCore version 5.1.6
 Copyright (c) 1993 - 2004 CompuGen Ltd.
 OM nucleic - nucleic search, using sw model
 Run on: August 19, 2004, 14:25:11 ; Search time 407.972 Seconds
 (without alignments)
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Title:
 Perfect score: US-09-285-306-5
 Sequence: 1 ccagagcgtgagggatc.....ggcgatcgaggggagcgt 705

Scoring table:
 IDENTITY NUC
 Gapop 10.0 , Gapext 1.0

Searched: 3228839 seqs, 2456066551 residues
 Total number of hits satisfying chosen parameters: 6457678

Minimum DB seq length: 0
 Maximum DB seq length: 2000000000
 Post-processing: Minimum Match 0%
 Maximum Match 100%
 Listing first 45 summaries

Database : Published Applications NA:*

1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:
 2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:
 3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:
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 5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:
 6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:
 7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:
 8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:
 9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:
 10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:
 11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:
 12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:
 13: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:
 14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:
 15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:
 16: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:
 17: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:
 18: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:
 19: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	705	100.0	705	9	US-09-285-306-4
2	705	100.0	705	9	US-09-285-306-5
3	705	100.0	705	9	US-09-285-306-6
4	705	100.0	705	9	US-09-285-306-7
5	705	100.0	705	9	US-09-285-306-8
6	705	100.0	705	9	US-09-285-306-9
7	705	100.0	705	9	US-09-285-306-12
8	705	100.0	705	9	US-09-285-306-13
9	705	100.0	705	9	US-09-285-306-14
10	705	100.0	705	9	US-09-285-306-16
11	705	100.0	705	9	US-09-285-306-24
12	703.4	99.8	705	9	US-09-285-306-17
13	695	98.6	705	9	US-09-285-306-3
14	693.4	98.4	705	9	US-09-285-306-11

15	691	98.0	705	9	US-09-285-306-10	Sequence 10, Appl
16	691	98.0	3444	13	US-10-282-122A-25737	Sequence 25737, A
17	687	97.4	687	9	US-09-285-306-18	Sequence 18, Appl
18	687	97.4	687	9	US-09-285-306-19	Sequence 19, Appl
19	687	97.4	687	9	US-09-285-306-20	Sequence 20, Appl
20	687	97.4	687	9	US-09-285-306-21	Sequence 21, Appl
21	687	97.4	687	9	US-09-285-306-22	Sequence 22, Appl
22	687	97.4	687	9	US-09-285-306-23	Sequence 23, Appl
23	687	97.4	687	9	US-09-285-306-25	Sequence 25, Appl
24	687	97.4	687	9	US-09-285-306-27	Sequence 27, Appl
25	660.2	93.6	705	9	US-09-285-306-143	Sequence 143, App
26	658.6	93.4	705	9	US-09-285-306-144	Sequence 144, App
27	655.4	93.0	705	9	US-09-285-306-87	Sequence 87, Appl
28	655.4	93.0	705	9	US-09-285-306-88	Sequence 88, Appl
29	655.4	93.0	705	9	US-09-285-306-90	Sequence 90, Appl
30	655.4	93.0	705	9	US-09-285-306-92	Sequence 92, Appl
31	655.4	93.0	705	9	US-09-285-306-96	Sequence 96, Appl
32	653.8	92.7	705	9	US-09-285-306-84	Sequence 84, Appl
33	653.8	92.7	705	9	US-09-285-306-86	Sequence 86, Appl
34	653.8	92.7	705	9	US-09-285-306-93	Sequence 93, Appl
35	653.8	92.7	705	9	US-09-285-306-94	Sequence 94, Appl
36	653.8	92.7	705	9	US-09-285-306-95	Sequence 95, Appl
37	652.2	92.5	705	9	US-09-285-306-85	Sequence 85, Appl
38	652.2	92.5	705	9	US-09-285-306-89	Sequence 89, Appl
39	652.2	92.5	705	9	US-09-285-306-91	Sequence 91, Appl
40	652.2	92.5	705	9	US-09-285-306-181	Sequence 181, App
41	642.2	91.1	687	9	US-09-285-306-146	Sequence 146, App
42	642.2	91.1	687	9	US-09-285-306-148	Sequence 148, App
43	637.4	90.4	687	9	US-09-285-306-100	Sequence 100, App
44	635.8	90.2	687	9	US-09-285-306-99	Sequence 99, Appl
45	635.8	90.2	687	9	US-09-285-306-145	Sequence 145, App

ALIGNMENTS

RESULT 1
 US-09-285-306-4
 ; Sequence 4, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingers, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 4
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 ; US-09-285-306-4

Query Match 100.0%; Score 705; DB 9; Length 705;
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	CCAGGACGTGGAGGCGATCACACCGCAGACCTGTATCAACATCCCTCAGTCGTCGCGG	60
Db	1	CCAGGACGTGGAGGCGATCACACCGCAGACCTGTATCAACATCCCTCAGTCGTCGCGG	60
QY	61	CGATCAAGAGTTCTTCGCGACCGACGACCTGTCCAGTTTCATGGACCAACAACCGCG	120
Db	61	CGATCAAGAGTTCTTCGCGACCGACGACCTGTCCAGTTTCATGGACCAACAACCGCG	120
QY	121	TGTCGGGGGTACCCACAAAGCGCGCTGTCTGGCGTGGCGCGGTGTCTGTCCCGGG	180
Db	121	TGTCGGGGGTACCCACAAAGCGCGCTGTCTGGCGTGGCGCGGTGTCTGTCCCGGG	180

Qy	181	AGCGGCGGGCTCGAGGTTCGACGCTGCCACTACGCGCGGATGTGCCGA	240
Db	181	AGCGGCGGGCTGGAGTCCGCGAGTCCGCGATGACCGGCGGATGTGCCGA	240
Qy	241	TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTCTCGTGTATCGCGGG	300
Db	241	TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTCTCGTGTATCGCGGG	300
Qy	301	TCAACCCCTTCGGGTTTCATCGAGACGCCGTACCGCAAGTGGTTCGACGGCGTGTACCG	360
Db	301	TCAACCCCTTCGGGTTTCATCGAGACGCCGTACCGCAAGTGGTTCGACGGCGTGTACCG	360
Qy	361	ACGAGATCCACTGACCTGACCCGCGACGAGGAGCCGCCACGTGGTGGCGCAGGCCAACT	420
Db	361	ACGAGATCCACTGACCTGACCCGCGACGAGGAGCCGCCACGTGGTGGCGCAGGCCAACT	420
Qy	421	CGCCGATCGACACAAGGCGCGGTTTCGGGAGGCGCGGTTGCTGGTTCGCCGCGAAGGCGG	480
Db	421	CGCCGATCGACACAAGGCGCGGTTTCGGGAGGCGCGGTTGCTGGTTCGCCGCGAAGGCGG	480
Qy	481	GGAGGTTCAGTACGTGCCCTCGTCCGAGGTGGATACATGACGCTGTCGCCGCCACAGA	540
Db	481	GGAGGTTCAGTACGTGCCCTCGTCCGAGGTGGATACATGACGCTGTCGCCGCCACAGA	540
Qy	541	TGGTGTGGTGGCGCACCGCGATGATCCGTTCTTCGAGCAGCAGCAGCAGCAGCAGTGC	600
Db	541	TGGTGTGGTGGCGCACCGCGATGATCCGTTCTTCGAGCAGCAGCAGCAGCAGCAGTGC	600
Qy	601	TGATGGGCGCAACATGACGCGCCAGGCGGTTCCGCTGGTGGCAGCAGGCGCGCTGG	660
Db	601	TGATGGGCGCAACATGACGCGCCAGGCGGTTCCGCTGGTGGCAGCAGGCGCGCTGG	660
Qy	661	TGGGCACCGCATGGAGCTGCGCGCGCGCATCGACGCGCGACGT	705
Db	661	TGGGCACCGCATGGAGCTGCGCGCGCGCATCGACGCGCGACGT	705

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RESULT 2
US-09-285-306-5
; Sequence 5, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Afymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 5
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-5

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1      CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCGTCCAGTCGTGGCGG 60
DB      1      CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCGTCCAGTCGTGGCGG 60
QY      61      CGATCAAGGAGTTCCTCGGCAACAGCCAGCTGTCCAGTTCATGACACGAGAACCCGC 120
DB      61      CGATCAAGGAGTTCCTCGGCAACAGCCAGCTGTCCAGTTCATGACACGAGAACCCGC 120
QY      121     TGTGGGGGCTCACCCACAGCGCCGCTGTGGCGCGTGGCGCGTGGTGTGTGTCGCCGG 180

```

QY	121	TGTCGGGGCTCA	CCCAACAAGCGCGCTGTGCGCGCTGGGCCCGGTGTGTGTCCCGGG	180
Db	121	TGTGCGGGCTCA	CCCAACAAGCGCGCTGTGCGCGCTGGGCCCGGTGTGTGTCCCGGG	180
QY	181	AGCGGCGCGGCTCG	AGGTTCCGCGAGTGCACCCGTCCCACTACGCGCCGATGTGCCGA	240
Db	181	AGCGGCGCGGCTCG	AGGTTCCGCGAGTGCACCCGTCCCACTACGCGCCGATGTGCCGA	240
QY	241	TCGAGACCCCGGAGGGTCC	CAACATCGGTCTGATCGGCTCGTGTGCGGTGTATGCGCGG	300
Db	241	TCGAGACCCCGGAGGGTCC	CAACATCGGTCTGATCGGCTCGTGTGCGGTGTATGCGCGGG	300
QY	301	TCACAACCGGTTCCGGTT	TCGAGAGCCCGTACCGCAAGTGGTCGACGCGGTGGTCACCG	360
Db	301	TCACAACCGGTTCCGGTT	TCGAGAGCCCGTACCGCAAGTGGTCGACGCGGTGGTCACCG	360
QY	361	ACGAGATCCACTACCT	AGCCGCGGAGGAGGACCGCAACGTGGTGGCGCAGGCCAACT	420
Db	361	ACGAGATCCACTACCT	AGCCGCGGAGGAGGACCGCAACGTGGTGGCGCAGGCCAACT	420
QY	421	CGCCGATCGACACAAGG	SCGGTTCGCGGAGCCCGGTGTGCGGAGCCCGGTGTGTCGCGCGCAGAGCGG	480
Db	421	CGCCGATCGACACAAGG	SCGGTTCGCGGAGCCCGGTGTGTCGCGCGCAGAGCGG	480
QY	481	GGAGGTGAGTACGTG	CGCTCTCGAGGTGGACTACATGACGTGTGCGCGCGCCAGA	540
Db	481	GGAGGTGAGTACGTG	CGCTCTCGAGGTGGACTACATGACGTGTGCGCGCGCCAGA	540
QY	541	TGGTTCGGTGCCACCG	CGATGATCCCGTTCTTCGAGCAGCAGCAGCCAAACGTGCC	600
Db	541	TGGTTCGGTGCCACCG	CGATGATCCCGTTCTTCGAGCAGCAGCAGCCAAACGTGCC	600
QY	601	TGATGGGGCCAA	CATGACGCGCAGGCGGTTCCGCTGGTCGCGAGCGAGGCGCGGTGG	660
Db	601	TGATGGGGCCAA	CATGACGCGCAGGCGGTTCCGCTGGTCGCGAGCGAGGCGCGGTGG	660
QY	661	TGGGCACGGCATGAG	CTGGCGCGGATCGACGCGGCGACT	705
Db	661	TGGGCACGGCATGAG	CTGGCGCGGATCGACGCGGCGACT	705

```

RESULT 4
US-09-285-306-7
; Sequence 7, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 7
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-7

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Query Match	100.0%;	Score 705;	DB 9;	Length 705;
Best Local Similarity	100.0%;	Pred. No. 2.1e-154;		
Matches	Conservative	0; Mismatches	0; Indels	0; Gaps
QY	1	CCGAGGACGTGGAGCGCATCACCGCAGACCCCTGCATCAACATCCGTCCAGTTCGTGGCGG	60	
Db	1	CCCAGGACGTGGAGCGCATCACCGCAGACCCCTGCATCAACATCCGTCCAGTTCGTGGCGG	60	
QY	61	CGATCAAGGAGTTCTTCGCCACCAGCCAGCGTGTCGCCAGTTTCATGGACCGAACAACCCGC	120	

Db	61	CGATCAGGAGTTCTTCGGCACAGCCAGCTGTCCAGTTCTTGACCAAGAACACCCGC	120
Qy	121	TGTCGGGGCTCACCCAAAGCGCGCTGTTCGGCGCTGGGCCGGGTGTCTGTCTCCGGG	180
Db	121	TGTCGGGGCTCACCCAAAGCGCGCTGTTCGGCGCTGGGCCGGGTGTCTGTCTCCGGG	180
Qy	181	AGCGGCGCGGCTGAGAGTTCGCGACGTGTCAACCCGTCCCACTACGCCCGCATGTGCCGA	240
Db	181	AGCGGCGCGGCTGAGAGTTCGCGACGTGTCAACCCGTCCCACTACGCCCGCATGTGCCGA	240
Qy	241	TCGAGACCCCGGAGGGTCCCAACATCGTCTCATCGGCTCGCTGTCTGTATGCGCGG	300
Db	241	TCGAGACCCCGGAGGGTCCCAACATCGTCTCATCGGCTCGCTGTCTGTATGCGCGG	300
Qy	301	TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGTGGTTCGACGCCGTGTCAACG	360
Db	301	TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGTGGTTCGACGCCGTGTCAACG	360
Qy	361	ACGAGATCCACTTACCTGACCGCCGACGAGGAGGACCGCCACGTGGTGGCGCAGGCGCACT	420
Db	361	ACGAGATCCACTTACCTGACCGCCGACGAGGAGGACCGCCACGTGGTGGCGCAGGCGCACT	420
Qy	421	CGCCGATCGACGAAGGGCCGGTTTCGGAGGCCCGGGTCTCTGGTCGCCCGCAAGCGG	480
Db	421	CGCCGATCGACGAAGGGCCGGTTTCGGAGGCCCGGGTCTCTGGTCGCCCGCAAGCGG	480
Qy	481	GGAGGTCCAGTACGTGCCCTTCGTCGAGGTGGACTCATGGAGCTGTCCCGCGCCAGA	540
Db	481	GGAGGTCCAGTACGTGCCCTTCGTCGAGGTGGACTCATGGAGCTGTCCCGCGCCAGA	540
Qy	541	TGGTGTCCGTGGCCACCGCGATGATCCGTTCTCTCGAGCACGACGCGCAACCGTGCCC	600
Db	541	TGGTGTCCGTGGCCACCGCGATGATCCGTTCTCTCGAGCACGACGCGCAACCGTGCCC	600
Qy	601	TGATGGGCGCCAAATGTCAGCGCCAGACGCTTCGTCGAGCAGCAGCGCCAAACCGTGCC	660
Db	601	TGATGGGCGCCAAATGTCAGCGCCAGACGCTTCGTCGAGCAGCAGCGCCAAACCGTGCC	660
Qy	661	TGGGCACCGGATGAGCTCGCGCGCGCATCGACCGCGCAGT	705
Db	661	TGGGCACCGGATGAGCTCGCGCGCGCATCGACCGCGCAGT	705

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RESULT 5
; US-09-285-306-8
; Sequence 8, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-8

```

	Query Match	100.0%	Score 705;	DB 9;	Length 705;
	Best Local Similarity	100.0%;	Pred. No. 2.1e-154;		
	Matches 705;	Conservative	0;	Mismatches	0; Indels 0; Gaps 0;
QY	1	CCGAGACGTGAGGCGGATCAACCGAGACCCCTGATCAACATCCGTCACGTCGTCGGG	60		
db	1	CCGAGACGTGAGGCGGATCAACCGAGACCCCTGATCAACATCCGTCACGTCGTCGGG	60		

1 CCCAGGACGTGAGGCGATCACCGCAGACCTGATCAACATCGTCAGTCGTGGCGG 60
 61 CGATCAAGAGTTCTTCCGACACCGACGAGCTGCCAGTTCATGACACGAAACACCGC 120
 61 CGATCAAGAGTTCTTCCGACACCGACGAGCTGCCAGTTCATGACACGAAACACCGC 120
 121 TGTGGGGCTCACCCACAAAGCGCCCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGG 180
 121 TGTGGGGCTCACCCACAAAGCGCCCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGG 180
 181 AGCGGGCCGGGTGAGGTCGCGACGTCGACCCCTGCCACTACCGCCGGATGTCGCCGA 240
 181 AGCGGGCCGGGTGAGGTCGCGACGTCGACCCCTGCCACTACCGCCGGATGTCGCCGA 240
 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGCGG 300
 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGCGG 300
 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTGGCGGTCACCG 360
 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTGGCGGTCACCG 360
 361 ACAGATCCACTACCTGACCGCGGACGAGAGACCGCCACGTGGTGGCGGTCACCG 420
 361 ACAGATCCACTACCTGACCGCGGACGAGAGACCGCCACGTGGTGGCGGTCACCG 420
 421 CGCGGATCGACGACGAGGCGCGTTCGCGAGGCGCGGTGCTGGTCCGCGCAAGCGG 480
 421 CGCGGATCGACGACGAGGCGCGTTCGCGAGGCGCGGTGCTGGTCCGCGCAAGCGG 480
 481 GCGAGTCCAGTACGTGCTCGCTCGGAGGTGAGTACATGAGCGTTCGCGCGGCGG 540
 481 GCGAGTCCAGTACGTGCTCGCTCGGAGGTGAGTACATGAGCGTTCGCGCGGCGG 540
 541 TGTGTGCGTGGCGACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCAACCGTGGCC 600
 541 TGTGTGCGTGGCGACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCAACCGTGGCC 600
 601 TGATGGCGCCCAACATGACGCGCGGTCGCTGGTGGCGAGCGAGCGCGCTGG 660
 601 TGATGGCGCCCAACATGACGCGCGGTCGCTGGTGGCGAGCGAGCGCGCTGG 660
 661 TGGCACCGGATGAGCTGCGCGCGGATGACGCGCGGACGT 705
 661 TGGCACCGGATGAGCTGCGCGCGGATGACGCGCGGACGT 705

RESULT 7
 US-09-285-306-12
 ; Sequence 12, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingeras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 12
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-12
 Query Match 100.0%; Score 705; DB 9; Length 705;
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

61 CGATCAAGAGTTCTTCCGACACCGACGAGCTGCCAGTTCATGACACGAAACACCGC 120
 61 CGATCAAGAGTTCTTCCGACACCGACGAGCTGCCAGTTCATGACACGAAACACCGC 120
 121 TGTGGGGCTCACCCACAAAGCGCCCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGG 180
 121 TGTGGGGCTCACCCACAAAGCGCCCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGG 180
 181 AGCGGGCCGGGTGAGGTCGCGACGTCGACCCCTGCCACTACCGCCGGATGTCGCCGA 240
 181 AGCGGGCCGGGTGAGGTCGCGACGTCGACCCCTGCCACTACCGCCGGATGTCGCCGA 240
 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGCGG 300
 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGTGTATGCGCGG 300
 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTGGCGGTCACCG 360
 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTGGTGGCGGTCACCG 360
 361 ACAGATCCACTACCTGACCGCGGACGAGAGACCGCCACGTGGTGGCGGTCACCG 420
 361 ACAGATCCACTACCTGACCGCGGACGAGAGACCGCCACGTGGTGGCGGTCACCG 420
 421 CGCGGATCGACGACGAGGCGCGTTCGCGAGGCGCGGTGCTGGTCCGCGCAAGCGG 480
 421 CGCGGATCGACGACGAGGCGCGTTCGCGAGGCGCGGTGCTGGTCCGCGCAAGCGG 480
 481 GCGAGTCCAGTACGTGCTCGCTCGGAGGTGAGTACATGAGCGTTCGCGCGGCGG 540
 481 GCGAGTCCAGTACGTGCTCGCTCGGAGGTGAGTACATGAGCGTTCGCGCGGCGG 540
 541 TGTGTGCGTGGCGACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCAACCGTGGCC 600
 541 TGTGTGCGTGGCGACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCAACCGTGGCC 600
 601 TGATGGCGCCCAACATGACGCGCGGTCGCTGGTGGCGAGCGAGCGCGCTGG 660
 601 TGATGGCGCCCAACATGACGCGCGGTCGCTGGTGGCGAGCGAGCGCGCTGG 660
 661 TGGCACCGGATGAGCTGCGCGCGGATGACGCGCGGACGT 705
 661 TGGCACCGGATGAGCTGCGCGCGGATGACGCGCGGACGT 705

RESULT 6
 US-09-285-306-9
 ; Sequence 9, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingeras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 9
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-9
 Query Match 100.0%; Score 705; DB 9; Length 705;
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 CCCAGGACGTGAGGCGGATCACCGCAGACCTGATCAACATCGTCAGTCGTGGCGG 60

QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCTGTGCGG 60
 DB |||||
 QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCTGTGCGG 60
 DB |||||
 QY 61 CGATCAAGAGTTCTTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAAGAACACCCGC 120
 DB |||||
 QY 61 CGATCAAGAGTTCTTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAAGAACACCCGC 120
 DB |||||
 QY 121 TGTGCGGGTTCACCCACAAAGCGCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCGCGG 180
 DB |||||
 QY 121 TGTGCGGGTTCACCCACAAAGCGCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCGCGG 180
 DB |||||
 QY 181 AGCGGCGCGGTTCAGAGGTCGCGAGCTGCACCCGTCCTCACTACGCGCGATGTGCCCGA 240
 DB |||||
 QY 181 AGCGGCGCGGTTCAGAGGTCGCGAGCTGCACCCGTCCTCACTACGCGCGATGTGCCCGA 240
 DB |||||
 QY 241 TCGAGACCCCGGAGGTCCCAACATCGTCTGATCGGCTCGCTGTGCGGTATGCCGCGG 300
 DB |||||
 QY 241 TCGAGACCCCGGAGGTCCCAACATCGTCTGATCGGCTCGCTGTGCGGTATGCCGCGG 300
 DB |||||
 QY 301 TCAACCCGTTCCGGTTCATCGAGAGCGCGTACCGCAAGGTGTTCGAGCGGCGTCAACCG 360
 DB |||||
 QY 301 TCAACCCGTTCCGGTTCATCGAGAGCGCGTACCGCAAGGTGTTCGAGCGGCGTCAACCG 360
 DB |||||
 QY 361 ACGAGATCCACTTACCTGACCGCGAGGAGGACCGCCACGTTGTTGGCGAGGCCAACT 420
 DB |||||
 QY 361 ACGAGATCCACTTACCTGACCGCGAGGAGGACCGCCACGTTGTTGGCGAGGCCAACT 420
 DB |||||
 QY 421 CGCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTGTGCTGCGCGCAAGCGG 480
 DB |||||
 QY 421 CGCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTGTGCTGCGCGCAAGCGG 480
 DB |||||
 QY 481 GCGAGTTCAGTACGTGCGCTTCGCGAGGTCGACTACATGACAGCTGTGCGCGCGG 540
 DB |||||
 QY 481 GCGAGTTCAGTACGTGCGCTTCGCGAGGTCGACTACATGACAGCTGTGCGCGCGG 540
 DB |||||
 QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCAGCAGCGTGC 600
 DB |||||
 QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCAGCAGCGTGC 600
 DB |||||
 QY 601 TGATGGGCGCCAAACATGACGCGCCAGCGGTTCGCTGCGAGCAGCGCGCGTGG 660
 DB |||||
 QY 601 TGATGGGCGCCAAACATGACGCGCCAGCGGTTCGCTGCGAGCAGCGCGCGTGG 660
 DB |||||
 QY 661 TGGGACCGGCGATGAGCTGCGCGCGCGATCGAGCGCGGCGACGT 705
 DB |||||
 QY 661 TGGGACCGGCGATGAGCTGCGCGCGCGATCGAGCGCGGCGACGT 705
 DB |||||

RESULT 8

US-09-285-306-13
 ; Sequence 13, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingers, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 13
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-13

Query Match

100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2.1e-154;
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCTGTGCGG 60
 DB |||||
 QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCTGTGCGG 60
 DB |||||
 QY 61 CGATCAAGAGTTCTTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAAGAACACCCGC 120
 DB |||||
 QY 61 CGATCAAGAGTTCTTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAAGAACACCCGC 120
 DB |||||
 QY 121 TGTGCGGGTTCACCCACAAAGCGCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCGCGG 180
 DB |||||
 QY 121 TGTGCGGGTTCACCCACAAAGCGCGCTGTTCGGCGCTGGGCGCGGTGTCTGTCCGCGG 180
 DB |||||
 QY 181 AGCGGCGCGGTTCAGAGGTCGCGAGCTGCACCCGTCCTCACTACGCGCGATGTGCCCGA 240
 DB |||||
 QY 181 AGCGGCGCGGTTCAGAGGTCGCGAGCTGCACCCGTCCTCACTACGCGCGATGTGCCCGA 240
 DB |||||
 QY 241 TCGAGACCCCGGAGGTCCCAACATCGTCTGATCGGCTCGCTGTGCGGTATGCCGCGG 300
 DB |||||
 QY 241 TCGAGACCCCGGAGGTCCCAACATCGTCTGATCGGCTCGCTGTGCGGTATGCCGCGG 300
 DB |||||
 QY 301 TCAACCCGTTCCGGTTCATCGAGAGCGCGTACCGCAAGGTGTTCGAGCGGCGTCAACCG 360
 DB |||||
 QY 301 TCAACCCGTTCCGGTTCATCGAGAGCGCGTACCGCAAGGTGTTCGAGCGGCGTCAACCG 360
 DB |||||
 QY 361 ACGAGATCCACTTACCTGACCGCGAGGAGGACCGCCACGTTGTTGGCGAGGCCAACT 420
 DB |||||
 QY 361 ACGAGATCCACTTACCTGACCGCGAGGAGGACCGCCACGTTGTTGGCGAGGCCAACT 420
 DB |||||
 QY 421 CGCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTGTGCTGCGCGCAAGCGG 480
 DB |||||
 QY 421 CGCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGTGTGCTGCGCGCAAGCGG 480
 DB |||||
 QY 481 GCGAGTTCAGTACGTGCGCTTCGCGAGGTCGACTACATGACAGCTGTGCGCGCGG 540
 DB |||||
 QY 481 GCGAGTTCAGTACGTGCGCTTCGCGAGGTCGACTACATGACAGCTGTGCGCGCGG 540
 DB |||||
 QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCAGCAGCGTGC 600
 DB |||||
 QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCAGCAGCGTGC 600
 DB |||||
 QY 601 TGATGGGCGCCAAACATGACGCGCCAGCGGTTCGCTGCGAGCAGCGCGCGTGG 660
 DB |||||
 QY 601 TGATGGGCGCCAAACATGACGCGCCAGCGGTTCGCTGCGAGCAGCGCGCGTGG 660
 DB |||||
 QY 661 TGGGACCGGCGATGAGCTGCGCGCGCGATCGAGCGCGGCGACGT 705
 DB |||||
 QY 661 TGGGACCGGCGATGAGCTGCGCGCGCGATCGAGCGCGGCGACGT 705
 DB |||||

RESULT 9

US-09-285-306-14
 ; Sequence 14, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingers, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 14
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-14

Fri Aug 20 12:39:18 2004

us-09-285-306-5.rnpb

```

; ORGANISM: Mycobacterium avium
US-09-285-306-16
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGCGGATCACACGCGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 1 CCCAGAGCTGGAGCGGATCACACGCGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGAGTCTTTCGGACACAGCCAGCTGTCCAGTTCCATGACCAAGAACACCCGC 120
Db 61 CGATCAAGAGTCTTTCGGACACAGCCAGCTGTCCAGTTCCATGACCAAGAACACCCGC 120
QY 121 TGTCCGGGCTACCCACAAGCGCGCTGTCCGCGCTGGCCCGCGGTGTCTTCCCGGG 180
Db 121 TGTCCGGGCTACCCACAAGCGCGCTGTCCGCGCTGGCCCGCGGTGTCTTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGCACCCGTCCTACACGCGCGGATGTCCCGA 240
Db 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGCACCCGTCCTACACGCGCGGATGTCCCGA 240
QY 241 TCAGACCCCGGAGGTCCTCAACATCGGTCTGATCGCTCGCTGTATGTCGCGGG 300
Db 241 TCAGACCCCGGAGGTCCTCAACATCGGTCTGATCGCTCGCTGTATGTCGCGGG 300
QY 301 TCACCCGTTTCGGGTTTCATCGAGACGCCGTACCGCAAGGTGGTCGACGGCGTGGTCA 360
Db 301 TCACCCGTTTCGGGTTTCATCGAGACGCCGTACCGCAAGGTGGTCGACGGCGTGGTCA 360
QY 361 ACCAGATCCACTACCTACCTGACCGCGACGAGGAGACCGCCACGTCGTGGCGAGCCAACT 420
Db 361 ACCAGATCCACTACCTACCTGACCGCGACGAGGAGACCGCCACGTCGTGGCGAGCCAACT 420
QY 421 CGCGGATCGACGACAAAGGCGCGTTCCGCGAGGCGCGGTCGTGGTCGCGCAAGCGG 480
Db 421 CGCGGATCGACGACAAAGGCGCGTTCCGCGAGGCGCGGTCGTGGTCGCGCAAGCGG 480
QY 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTCGAGTGGACTACATGGACGTGTGCGCGGCCAGA 540
Db 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTCGAGTGGACTACATGGACGTGTGCGCGGCCAGA 540
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCGTTCTCTCGAGACGACGACGCCAACCGTGCCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCGTTCTCTCGAGACGACGACGCCAACCGTGCCC 600
QY 601 TGATGGCGCCCAACATGACGCGCCAGGCGTTCGCTGTGTCGAGCGAGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATGACGCGCCAGGCGTTCGCTGTGTCGAGCGAGCGCGCTGG 660
QY 661 TGGGCACCGCATGGAGCTGCGCGCGCATCGACGCGCGACGT 705
Db 661 TGGGCACCGCATGGAGCTGCGCGCGCATCGACGCGCGACGT 705

RESULT 11
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA

; ORGANISM: Mycobacterium avium
US-09-285-306-16
Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGCGGATCACACGCGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 1 CCCAGAGCTGGAGCGGATCACACGCGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGAGTCTTTCGGACACAGCCAGCTGTCCAGTTCCATGACCAAGAACACCCGC 120
Db 61 CGATCAAGAGTCTTTCGGACACAGCCAGCTGTCCAGTTCCATGACCAAGAACACCCGC 120
QY 121 TGTCCGGGCTACCCACAAGCGCGCTGTCCGCGCTGGCCCGCGGTGTCTTCCCGGG 180
Db 121 TGTCCGGGCTACCCACAAGCGCGCTGTCCGCGCTGGCCCGCGGTGTCTTCCCGGG 180
QY 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGCACCCGTCCTACACGCGCGGATGTCCCGA 240
Db 181 AGCGGCGCGGCTGGAGGTCCGCGACGTGCACCCGTCCTACACGCGCGGATGTCCCGA 240
QY 241 TCAGACCCCGGAGGTCCTCAACATCGGTCTGATCGCTCGCTGTATGTCGCGGG 300
Db 241 TCAGACCCCGGAGGTCCTCAACATCGGTCTGATCGCTCGCTGTATGTCGCGGG 300
QY 301 TCACCCGTTTCGGGTTTCATCGAGACGCCGTACCGCAAGGTGGTCGACGGCGTGGTCA 360
Db 301 TCACCCGTTTCGGGTTTCATCGAGACGCCGTACCGCAAGGTGGTCGACGGCGTGGTCA 360
QY 361 ACCAGATCCACTACCTGACCGCGACGAGGAGACCGCCACGTCGTGGCGAGCCAACT 420
Db 361 ACCAGATCCACTACCTGACCGCGACGAGGAGACCGCCACGTCGTGGCGAGCCAACT 420
QY 421 CGCGGATCGACGACAAAGGCGCGTTCCGCGAGGCGCGGTCGTGGTCGCGCAAGCGG 480
Db 421 CGCGGATCGACGACAAAGGCGCGTTCCGCGAGGCGCGGTCGTGGTCGCGCAAGCGG 480
QY 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTCGAGTGGACTACATGGACGTGTGCGCGGCCAGA 540
Db 481 GCGAGGTCGAGTACGTGCCCTCGTCGAGGTCGAGTGGACTACATGGACGTGTGCGCGGCCAGA 540
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCGTTCTCTCGAGACGACGACGCCAACCGTGCCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCGTTCTCTCGAGACGACGACGCCAACCGTGCCC 600
QY 601 TGATGGCGCCCAACATGACGCGCCAGGCGTTCGCTGTGTCGAGCGAGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATGACGCGCCAGGCGTTCGCTGTGTCGAGCGAGCGCGCTGG 660
QY 661 TGGGCACCGCATGGAGCTGCGCGCGCATCGACGCGCGACGT 705
Db 661 TGGGCACCGCATGGAGCTGCGCGCGCATCGACGCGCGACGT 705

RESULT 10
US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA
```

```
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGCGATCACCCGACAGCCCTGATCAACATCCGTCCAGTCTGGCGG 60
Db 1 CCAGAGCTGGAGGCGATCACCCGACAGCCCTGATCAACATCCGTCCAGTCTGGCGG 60
QY 61 CGATCAAGAGGTTCTTCGGCACACAGCCAGCTGTCGAGTTCATGACACAGAACCCCG 120
Db 61 CGATCAAGAGGTTCTTCGGCACACAGCCAGCTGTCGAGTTCATGACACAGAACCCCG 120
QY 121 TGTGGGGGTCAACCCACAAGCCCGCTGTGCGCGCTGGGCGCGGTGGTCTGTCCCGG 180
Db 121 TGTGGGGGTCAACCCACAAGCCCGCTGTGCGCGCTGGGCGCGGTGGTCTGTCCCGG 180
QY 181 AGCGGGCGGGTGGAGGTCGCGAGCTGCAACCGTCCCACTACGCGCGGATGTCCCGA 240
Db 181 AGCGGGCGGGTGGAGGTCGCGAGCTGCAACCGTCCCACTACGCGCGGATGTCCCGA 240
QY 241 TCGAGACCCCGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTATGCGCGG 300
Db 241 TCGAGACCCCGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTATGCGCGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTCCAGCGGTGTCACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTCCAGCGGTGTCACCG 360
QY 361 ACAGATCCACTACTGACCGCGAGGAGGACCGCAAGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCGCGAGGAGGACCGCAAGTGGTGGCGAGGCCAACT 420
QY 421 CGCGCATCGACAGCAAGGGCGGTTCCGCGAGGCGCGGTTGGTCCGCGCAAGGGCG 480
Db 421 CGCGCATCGACAGCAAGGGCGGTTCCGCGAGGCGCGGTTGGTCCGCGCAAGGGCG 480
QY 481 GCGAGGTCGAGTACGTCCTCTGTCGAGGTGGACTACATGACGCTGTCGCGCGCCAGA 540
Db 481 GCGAGGTCGAGTACGTCCTCTGTCGAGGTGGACTACATGACGCTGTCGCGCGCCAGA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGCCAACCGTGGCC 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGCCAACCGTGGCC 600
QY 601 TGATGGCGCCAAACATGACGCGCCAGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660
Db 601 TGATGGCGCCAAACATGACGCGCCAGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660
QY 661 TGGGCACCGGATGGAGCTGCGCGCGCGATCGACGGCGGACGT 705
Db 661 TGGGCACCGGATGGAGCTGCGCGCGCGATCGACGGCGGACGT 705
```

RESULT 12

```
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
```

```
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17
```

```
Query Match      99.8%; Score 703.4; DB 9; Length 705;
Best Local Similarity 99.9%; Pred. No. 4.9e-154;
Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 1 CCAGAGCTGGAGGCGATCACCCGACAGCCCTGATCAACATCCGTCCAGTCTGGCGG 60
Db 1 CCAGAGCTGGAGGCGATCACCCGACAGCCCTGATCAACATCCGTCCAGTCTGGCGG 60
QY 61 CGATCAAGAGGTTCTTCGGCACACAGCCAGCTGTCGAGTTCATGACACAGAACCCCG 120
Db 61 CGATCAAGAGGTTCTTCGGCACACAGCCAGCTGTCGAGTTCATGACACAGAACCCCG 120
QY 121 TGTGGGGGTCAACCCACAAGCCCGCTGTGCGCGCTGGGCGCGGTGGTCTGTCCCGG 180
Db 121 TGTGGGGGTCAACCCACAAGCCCGCTGTGCGCGCTGGGCGCGGTGGTCTGTCCCGG 180
QY 181 AGCGGGCGGGTGGAGGTCGCGAGCTGCAACCGTCCCACTACGCGCGGATGTCCCGA 240
Db 181 AGCGGGCGGGTGGAGGTCGCGAGCTGCAACCGTCCCACTACGCGCGGATGTCCCGA 240
QY 241 TCGAGACCCCGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTATGCGCGG 300
Db 241 TCGAGACCCCGAGGTTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTATGCGCGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTCCAGCGGTGTCACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTCCAGCGGTGTCACCG 360
QY 361 ACAGATCCACTACTGACCGCGAGGAGGACCGCAAGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCGCGAGGAGGACCGCAAGTGGTGGCGAGGCCAACT 420
QY 421 CGCGCATCGACAGCAAGGGCGGTTCCGCGAGGCGCGGTTGGTCCGCGCAAGGGCG 480
Db 421 CGCGCATCGACAGCAAGGGCGGTTCCGCGAGGCGCGGTTGGTCCGCGCAAGGGCG 480
QY 481 GCGAGGTCGAGTACGTCCTCTGTCGAGGTGGACTACATGACGCTGTCGCGCGCCAGA 540
Db 481 GCGAGGTCGAGTACGTCCTCTGTCGAGGTGGACTACATGACGCTGTCGCGCGCCAGA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGCCAACCGTGGCC 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGCCAACCGTGGCC 600
QY 601 TGATGGCGCCAAACATGACGCGCCAGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660
Db 601 TGATGGCGCCAAACATGACGCGCCAGCGGTTCCGCTGGTGGCGAGCGCGCGCTGG 660
QY 661 TGGGCACCGGATGGAGCTGCGCGCGCGATCGACGGCGGACGT 705
Db 661 TGGGCACCGGATGGAGCTGCGCGCGCGATCGACGGCGGACGT 705
```

RESULT 13

```
US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
```

Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-11

Query Match 98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 1e-151;
Matches 697; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTGTGGCGG 60
Db 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACNTCCGTCGTCGTGGCGG 60
QY 61 CGATCAAGAGGTTCTTCGGCACCGACCGAGTGTCCAGTTTCATGGACCAACCCGC 120
Db 61 CGATCAAGAGGTTCTTCGGCACCGACCGAGTGTCCAGTTTCATGGACCAACCCGC 120
QY 121 TGTGGGGCTCACCCACAGCGCGCTGTGGCGCTGGCGCGGTGGTCTGTCTGCCGG 180
Db 121 TGTGGGGCTCACCCACAGCGCGCTGTGGCGCTGGCGCGGTGGTCTGTCTGCCGG 180
QY 181 AGCGGGCGGGCTGGAGTCCGGACGTGCACCCCTCCACTACGGCCGAGTGTCCCGA 240
Db 181 AGCGGGCGGGCTGGAGTCCGGACGTGCACCCCTCCACTACGGCCGAGTGTCCCGA 240
QY 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCTGTCTGCCGG 300
Db 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCTGTCTGCCGG 300
QY 301 TCAACCGTTGGGTTTCATCGAGACCGGTACCGCAAGGTGGTCCAGCGGTGTCCACCG 360
Db 301 TGAACCGTTGGGTTTCATCGAGACCGGTACCGCAAGGTGGTCCAGCGGTGTCCACCG 360
QY 361 ACAGATCCACTACTCTGACCGCCGACGAGGAGGACCGCACGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTCTGACCGCCGACGAGGAGGACCGCACGTGGTGGCGAGGCCAACT 420
QY 421 CGCGGATCGACGACAAAGGGCGGTTCCGGAGGCGCGGGTCTGTCTGCCCGAAGGCGG 480
Db 421 CGCGGATCGACGACAAAGGGCGGTTCCGGAGGCGCGGGTCTGTCTGCCCGAAGGCGG 480
QY 481 GCGAGGTCGAGTACGTGCTTCGTCGAGGTGGACTACATGAGAGTGTTCGCGCGGCCAGA 540
Db 481 GCGAGGTCGAGTACGTGCTTCGTCGAGGTGGACTACATGAGAGTGTTCGCGCGGCCAGA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCTCGAGACGACGACGCCAACCGTCCCC 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCTCGAGACGACGACGCCAACCGTCCCC 600
QY 601 TGATGGGGCCCAACATGACGCGCGAGGCGGTTCGCTGTGGCAGCGAGGCGCGCTGG 660

EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-3

Query Match 98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.8%; Pred. No. 4.3e-152;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTGTGGCGG 60
Db 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCGTCGTGGCGG 60
QY 61 CGATCAAGAGGTTCTTCGGCACCGACCGAGTGTCCAGTTTCATGGACCAACCCGC 120
Db 61 CGATCAAGAGGTTCTTCGGCACCGACCGAGTGTCCAGTTTCATGGACCAACCCGC 120
QY 121 TGTGGGGCTCACCCACAGCGCGCTGTGGCGCTGGCGCGGTGGTCTGTCTGCCGG 180
Db 121 TGTGGGGCTCACCCACAGCGCGCTGTGGCGCTGGCGCGGTGGTCTGTCTGCCGG 180
QY 181 AGCGGGCGGGCTGGAGTCCGGACGTGCACCCCTCCACTACGGCCGAGTGTCCCGA 240
Db 181 AGCGGGCGGGCTGGAGTCCGGACGTGCACCCCTCCACTACGGCCGAGTGTCCCGA 240
QY 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCTGTCTGCCGG 300
Db 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTCTGTCTGCCGG 300
QY 301 TCAACCGTTGGGTTTCATCGAGACCGGTACCGCAAGGTGGTCCAGCGGTGTCCACCG 360
Db 301 TCAACCGTTGGGTTTCATCGAGACCGGTACCGCAAGGTGGTCCAGCGGTGTCCACCG 360
QY 361 ACAGATCCACTACTCTGACCGCCGACGAGGAGGACCGCACGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTCTGACCGCCGACGAGGAGGACCGCACGTGGTGGCGAGGCCAACT 420
QY 421 CGCGGATCGACGACAAAGGGCGGTTCCGGAGGCGCGGGTCTGTCTGCCCGAAGGCGG 480
Db 421 CGCGGATCGACGACAAAGGGCGGTTCCGGAGGCGCGGGTCTGTCTGCCCGAAGGCGG 480
QY 481 GCGAGGTCGAGTACGTGCTTCGTCGAGGTGGACTACATGAGAGTGTTCGCGCGGCCAGA 540
Db 481 GCGAGGTCGAGTACGTGCTTCGTCGAGGTGGACTACATGAGAGTGTTCGCGCGGCCAGA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCTCGAGACGACGACGCCAACCGTCCCC 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTCTCGAGACGACGACGCCAACCGTCCCC 600
QY 601 TGATGGGGCCCAACATGACGCGCGAGGCGGTTCGCTGTGGCAGCGAGGCGCGCTGG 660
Db 601 TGATGGGGCCCAACATGACGCGCGAGGCGGTTCGCTGTGGCAGCGAGGCGCGCTGG 660
QY 661 TGGGACCGGATGAGTGTGGCGGGCGATCGAGCGCGGACGT 705
Db 661 TGGGACCGGATGAGTGTGGCGGGCGATCGAGCGCGGACGT 705

RESULT 14
US-09-285-306-11
; Sequence 11, Application US/09285306A

Db	601	TGATGGGCGCCCAACATGCAAGCGCAGCGCGGTTCGCTGGTGGCGACAGGCGCGCGCTGG	660
QY	661	TGGCACCGCGCATGGAGCTGCGCGCGCGGCGATCGACGCGCGGACGT	705
Db	661	TGGCACCGCGCATGGAGCTGCGCGCGCGGCGATNGACGCGCGGACGT	705
RESULT 15			
US-09-285-306-10			
; Sequence 10, Application US/09285306A			
; Publication No. US20020187467A1			
; GENERAL INFORMATION:			
; APPLICANT: Gingeras, Thomas			
; APPLICANT: Drenkow, Jorg			
; APPLICANT: Affymetrix, Inc.			
; TITLE OF INVENTION: Mycobacterial rpoB Sequences			
; FILE REFERENCE: 018547-018570US			
; CURRENT APPLICATION NUMBER: US/09/285,306A			
; CURRENT FILING DATE: 1999-04-02			
; EARLIER APPLICATION NUMBER: US 60/080,616			
; EARLIER FILING DATE: 1998-04-03			
; NUMBER OF SEQ ID NOS: 181			
; SOFTWARE: FastSeq for Windows Version 3.0			
; SEQ ID NO 10			
; LENGTH: 705			
; TYPE: DNA			
; ORGANISM: Mycobacterium avium			
US-09-285-306-10			
Query Match 98.0%; Score 691; DB 9; Length 705;			
Best Local Similarity 98.0%; Pred. No. 3,7e-151;			
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;			
QY	1	CCGAGGACGTGGAGGGGATCACCGCAGACCCCTGATCAACATCCGTCAGTCCGTGCGG 60	
Db	1	CCGAGGACGTGGAGGGGATCACCGCAGACCCCTGATCAACATCCGTCCGTCTGTGGCG 60	
QY	61	CGATCAAGGAGTTCTTCGGCACACGACGCTGTCCAGTTTCATGGACGAGAACACCGCG 120	
Db	61	CGATCAAGGAGTTCTTCGGCACACGACGCTGTCCCACTTCATGGACGAGAACACCGCG 120	
QY	121	TGTCGGGGCTCACCCACAAGCGCGCCTGTTCGGCGCTGGGCGCGGTGTCTGTCCCGGG 180	
Db	121	TGTCGGGTCTGACCCACAAGCGCGCCTGTTCGGCGCTGGGCGCGGTGTCTGTCCCGGG 180	
QY	181	AGCGGCGCGGCTGGAGGTTCGGACGTGCACCCGTCCCACTACGCGCGGATGTCCCGA 240	
Db	181	AGCGGCGCGGCTGGAGGTTCGGACGTGCACCCGTCCCACTACGCGCGGATGTGCCCA 240	
QY	241	TCGAGACCCCGGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTGGTGTATGCGCGGG 300	
Db	241	TCGAGACCCCGGAGGGTCCCAACATCGTCTGATCGGCTCGCTGTGGTGTATGCGCGGG 300	
QY	301	TCAACCGTTCGGGTTCATCGAGACGCCGTACCGCAAGTGTGTTCGACGCGGTGTCAACCG 360	
Db	301	TSAACCCGTTTCGGGTTCATCGAGACCCCGTACCGCAAGTGTGTTCGACGCGGTGTCAACCG 360	
QY	361	ACGAGATCCACTACCTGACCGCGCAGGAGACCGCCACGTTGTTGGCGAGCCAACT 420	
Db	361	ACGAGATCCACTACCTGACCGCGCAGGAGACCGCCACGTTGTTGGCGAGCCAACT 420	
QY	421	CGCCGATCGACGACAAGGGCGCGTTTCGCGAGGCGCGGTGTGTGTTCGCGCAAGCGG 480	
Db	421	CGCCGATCGACGACAAGGGCGCGTTTCGAGAGKCCCGGGTGTGTGTTCGCGCAAGCGG 480	
QY	481	GGAGGTCGAGTACGTGTCCTTCGAGGTGACTACATGGAAGTGTGTGCGCGCGCAGA 540	
Db	481	GGAGGTCGAGTACGTGTCCTTCGAGGTGACTACATGGAAGTGTGTGCGCGCGCAGA 540	
QY	541	TGTTGTTCGTTGGGCCACCGGATCATCCGTTCTCTCGACACGACGACGCAACCGTGC 600	
Db	541	TGTTGTTCGTTGGGCCACCGGATCATCCGTTCTCTCGACACGACGACGCAACCGTGC 600	

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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 12:36:51 ; Search time 66.4446 Seconds
(without alignments)
5888.223 Million cell updates/sec

Title: US-09-285-306-6

Perfect score: 705

Sequence: 1 cccagacgtgagcgatcc.....ggcgatcgacggcgagct 705

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA.*

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- 2: /cgn2_6/ptodata/2/ina/5B.COMB.seq.*
- 3: /cgn2_6/ptodata/2/ina/6A.COMB.seq.*
- 4: /cgn2_6/ptodata/2/ina/6B.COMB.seq.*
- 5: /cgn2_6/ptodata/2/ina/PCJUS.COMB.seq.*
- 6: /cgn2_6/ptodata/2/ina/backfiles1.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	3	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	4	US-08-520-946-135
11	530.4	75.2	620	4	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-09-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	4	US-08-520-946-136
19	528.8	75.0	620	4	US-08-520-946-137
20	528.8	75.0	620	4	US-08-520-946-139
21	528.8	75.0	620	4	US-08-520-946-140
22	528.8	75.0	620	4	US-09-655-378A-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	371.2	52.7	4074	4	US-09-252-991A-4737

28	371.2	52.7	4032	4	US-09-252-991A-4771	Sequence 4771, Ap
29	337.2	47.8	4083	4	US-09-489-039A-22	Sequence 22, Appl
30	337.2	47.8	4206	4	US-09-489-039A-30	Sequence 30, Appl
31	293.4	41.6	432	2	US-08-313-185-59	Sequence 59, Appl
32	293.4	41.6	432	3	US-09-082-614A-59	Sequence 36, Appl
33	286.2	40.6	324	4	US-08-750-088A-36	Sequence 36, Appl
34	286.2	40.6	324	4	US-09-540-236-1097	Sequence 1097, Ap
35	265.2	37.6	2964	4	US-09-543-681A-3177	Sequence 3177, Ap
36	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 20, Appl
37	265.2	37.6	31063	4	US-09-596-002-20	Sequence 35, Appl
38	255.6	36.3	319	4	US-08-750-088A-35	Sequence 35, Appl
39	255.6	36.3	319	4	US-09-722-319-35	Sequence 401, App
40	249.8	35.4	11935	4	US-09-634-238-401	Sequence 111, App
41	244.4	34.7	14672	4	US-08-961-527-111	Sequence 1, Appl
42	244.4	34.7	1830121	4	US-09-557-884-1	Sequence 1, Appl
43	244.4	34.7	1830121	4	US-09-643-990A-1	Sequence 4006, Ap
44	241.2	34.2	4143	4	US-09-328-352-4006	Sequence 34, Appl
45	226.4	32.1	329	4	US-08-750-088A-34	

ALIGNMENTS

RESULT 1
US-08-797-812-24
; Sequence 24, Application US/08797812
; Patent No. 6228575
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas A.
; APPLICANT: Mack, David
; APPLICANT: Chee, Mark S.
; APPLICANT: Berno, Anthony J.
; APPLICANT: Striver, Lubert
; APPLICANT: Ghandour, Ghassan
; APPLICANT: Wang, Ching
; TITLE OF INVENTION: Chip-Based Species Identification and
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/797,812
; FILING DATE: 07-FEB-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/017,765
; FILING DATE: 15-MAY-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/629,031
; FILING DATE: 08-APR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/012,631
; FILING DATE: 01-MAR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/011,339
; FILING DATE: 08-FEB-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Fitts, Renee A.
; REGISTRATION NUMBER: 35,136
; REFERENCE/DOCKET NUMBER: 16528X-018550
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-326-2400
; TELEFAX: 415-326-2422

Fri Aug 20 12:39:18 2004

FILE REFERENCE: 24366-20007.00

CURRENT APPLICATION NUMBER: US/09/103.840A

CURRENT FILING DATE: 1998-06-24

NUMBER OF SEQ ID NOS: 2

SOFTWARE: Patent in ver. 2.1

SEQ ID NO 2

LENGTH: 4403765

TYPE: DNA

ORGANISM: Mycobacterium tuberculosis

FEATURE:

OTHER INFORMATION: CDC 1551

OTHER INFORMATION: "n" bases at various positions throughout the sequence

OTHER INFORMATION: represent a, t, c or g

US-09-103-840A-2

Query Match 85.5%; Score 603; DB 3; Length 4403765;

Best Local Similarity 91.4%; Pred. No. 3.9e-110; Indels 0; Gaps 0;

Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

QY	1	CCCAGGACGTGAGGCGGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG	60
Db	762963	CCCAGGACGTGAGGCGGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG	763022
QY	61	CGATCAAGGAGTTCTTGGCACCAGCCAGCTGCCAGTTCCAGTTTCATGGACCAACACCCGC	120
Db	763023	CGATCAAGGAGTTCTTGGCACCAGCCAGCTGCCAGTTTCATGGACCAACACCCGC	763082
QY	121	TGTGCGGGCTACCCCAAGCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGGG	180
Db	763083	TGTGCGGGCTACCCCAAGCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGGG	763142
QY	181	AGCGGCGCGGGTGGAGGTCCGCGACGTGCACCGTCCACTACGCGCGGATGTCACCG	240
Db	763143	AGCGGCGCGGGTGGAGGTCCGCGACGTGCACCGTCCACTACGCGCGGATGTCACCG	763202
QY	241	TCGAGACCCCGAGGGTCCCAACATCGGTCTGTATCGGTCTCGGTCTGTATCGCGGG	300
Db	763203	TCGAGACCCCGAGGGTCCCAACATCGGTCTGTATCGGTCTCGGTCTGTATCGCGGG	763262
QY	301	TCAACCGGTTCCGGGTTTCATCGAGACGCCGTACCGCAAGGTGGTGCAGCGGTGTACCG	360
Db	763263	TCAACCGGTTCCGGGTTTCATCGAGACGCCGTACCGCAAGGTGGTGCAGCGGTGTACCG	763322
QY	361	ACGAGATCCACTACTGACCGCGGACGAGGAGGACCGCCACGTCGTCGCGGCGCAACT	420
Db	763323	ACGAGATCCACTACTGACCGCGGACGAGGAGGACCGCCACGTCGTCGCGGCGCAACT	763382
QY	421	CGCGGATCGACGACAGGCGCGGTTCGCGGAGGCGCGGTCTCGTCCGCGCGCAAGCGG	480
Db	763383	CGCGGATCGATGCGGACGCGGTTCGTCGAGCGCGCGGTCTCGTCCGCGCGCAAGCGG	763442
QY	481	GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGACGTGTCCGCGCGCAGA	540
Db	763443	GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGACGTGTCCGCGCGCAGA	763502
QY	541	TGGTGTCCGTGGCCACCGCGATGATGCCCTCGTCCGAGCAGCAGCAGCCACCGTGC	600
Db	763503	TGGTGTCCGTGGCCACCGCGATGATGCCCTCGTCCGAGCAGCAGCAGCCACCGTGC	763562
QY	601	TCATGGGCGCCAAACATGACGCGCGGCTTCGCTGTCGAGCGAGGCGCGCTGG	660
Db	763563	TCATGGGCGCCAAACATGACGCGCGGCTTCGCTGTCGAGCGAGGCGCGCTGG	763622
QY	661	TGGGACCCGGATGGAGCTGCGCGCGCGGATGCGCGG	699
Db	763623	TGGGACCCGGATGGAGCTGCGCGCGCGGATGCGCGG	763661

RESULT 3

US-09-103-840A-1

; Sequence 1, Application US/09103840A

; Patent No. 6294328

; GENERAL INFORMATION:

INFORMATION FOR SEQ ID NO: 24:

SEQUENCE CHARACTERISTICS:

LENGTH: 706 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: cDNA

US-08-797-812-24

Query Match 86.6%; Score 610.6; DB 3; Length 706;

Best Local Similarity 91.6%; Pred. No. 8.1e-112; Indels 0; Gaps 0;

Matches 646; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

QY	1	CCCAGGACGTGAGGCGGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG	60
Db	2	CCCAGGACGTGAGGCGGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG	61
QY	61	CGATCAAGGAGTTCTTGGCACCAGCCAGCTGCCAGTTTCATGGACCAACACCCGC	120
Db	62	CGATCAAGGAGTTCTTGGCACCAGCCAGCTGCCAGTTTCATGGACCAACACCCGC	121
QY	121	TGTGCGGGCTACCCCAAGCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGGG	180
Db	122	TGTGCGGGCTACCCCAAGCGCGCTGTGCGCGCTGGGCCCGGGTGTCTGTCCCGGG	181
QY	181	AGCGGCGCGGGTGGAGGTCCGCGACGTGCACCGTCCACTACGCGCGGATGTCACCG	240
Db	182	AGCGGCGCGGGTGGAGGTCCGCGACGTGCACCGTCCACTACGCGCGGATGTCACCG	241
QY	241	TCGAGACCCCGAGGGTCCCAACATCGGTCTGTATCGGTCTCGGTCTGTATCGCGGG	300
Db	242	TCGAGACCCCGAGGGTCCCAACATCGGTCTGTATCGGTCTCGGTCTGTATCGCGGG	301
QY	301	TCAACCGGTTCCGGGTTTCATCGAGACGCCGTACCGCAAGGTGGTGCAGCGGTGTACCG	360
Db	302	TCAACCGGTTCCGGGTTTCATCGAGACGCCGTACCGCAAGGTGGTGCAGCGGTGTACCG	361
QY	361	ACGAGATCCACTACTGACCGCGGACGAGGAGGACCGCCACGTCGTCGCGGCGCAACT	420
Db	362	ACGAGATCCACTACTGACCGCGGACGAGGAGGACCGCCACGTCGTCGCGGCGCAACT	421
QY	421	CGCGGATCGACGACAGGCGCGGTTCGCGGAGGCGCGGTCTCGTCCGCGCGCAAGCGG	480
Db	422	CGCGGATCGATGCGGACGCGGTTCGTCGAGCGCGCGGTCTCGTCCGCGCGCAAGCGG	481
QY	481	GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGACGTGTCCGCGCGCAGA	540
Db	482	GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGACGTGTCCGCGCGCAGA	541
QY	541	TGGTGTCCGTGGCCACCGCGATGATGCCCTCGTCCGAGCAGCAGCAGCCACCGTGC	600
Db	542	TGGTGTCCGTGGCCACCGCGATGATGCCCTCGTCCGAGCAGCAGCAGCCACCGTGC	601
QY	601	TCATGGGCGCCAAACATGACGCGCGGCTTCGCTGTCGAGCGAGGCGCGCTGG	660
Db	602	TCATGGGCGCCAAACATGACGCGCGGCTTCGCTGTCGAGCGAGGCGCGCTGG	661
QY	661	TGGGACCCGGATGGAGCTGCGCGCGCGGATGCGCGG	705
Db	662	TGGGACCCGGATGGAGCTGCGCGCGCGGATGCGCGG	706

RESULT 2

US-09-103-840A-2

; Sequence 2, Application US/09103840A

; Patent No. 6294328

; GENERAL INFORMATION:

; APPLICANT: FLEISCHMAN, Robert D.

; APPLICANT: WHITE, Owen R.

; APPLICANT: FRASER, Claire M.

; APPLICANT: VENTER, John C.

; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM

; TUBERCULOSIS


```

; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.4%; Pred. No. 3.9e-110;
Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGATCACCCGACAGCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 761003 CCCAGGACGTGGAGGCGATCACCCGACAGCCCTGATCAACATCCGTCAGTCGTGGCGG 761062

QY 61 CGATCAAGAGGATCTTTCGGCACAGCCAGCTGTCCAGTTCATGGACCAAGAACCCCG 120
Db 761063 CGATCAAGAGGATCTTTCGGCACAGCCAGCTGTCCAGTTCATGGACCAAGAACCCCG 761122

QY 121 TGTCCGGGCTACCCACAAGCCCGCTGTGCGCGCTGGCGCCGGTGTCTGTCCCGGG 180
Db 761123 TGTCCGGGCTACCCACAAGCCCGCTGTGCGCGCTGGCGCCGGTGTCTGTCCCGGG 761182

QY 181 AGCGGCGCGGTGAGGTCCGCGAGCTGACCCGTCACCCGTCGGGCGCGGTGTGTACGTG 761182
Db 761183 AGCGTCCGCGGTGAGGTCCGCGAGCTGACCCGTCACCCGTCGGGCGCGGTGTGTACGTG 761242

QY 241 TCGAGACCCCGAGGCTCCCAACATCGTCTGATCGGTGCGGTGTGTCGTGTGCGGG 300
Db 761243 TCGAACCCTTGAGGGGCGCAACATCGTCTGATCGGTGCGGTGTGTCGTGTGCGGG 761302

QY 301 TCAACCCGTTCCGGTTTCAGAGACCGCTATCCGCAAGGTGTGACGCGGTGTCACCG 360
Db 761303 TCAACCCGTTCCGGTTTCAGAGACCGCTATCCGCAAGGTGTGTCACGCGGTGTCACCG 761362

QY 361 ACAGATCCACTACTGACCGCCGACGAGGAGGACCGCCAGCTGTGTCGCGAGGCCAACT 420
Db 761363 ACAGATCGTGTACTGACCGCCGACGAGGAGGACCGCCAGCTGTGTCGCGAGGCCAACT 761422

QY 421 CGCGATCGACGACAAAGGCGCGGTTCGCGGAGGCGCGGTGTCGCGCGCGAGCGG 480
Db 761423 CGCGATCGATCGGACGCGGTGCTTGTGCGAGCGCGCGGTGTCGCGCGCGAGCGG 761482

QY 481 GCGAGTTCGAGTACGTGCTGTCGAGTGGACTATAGAGTGTGTCGCGCGCGCAGA 540
Db 761483 GCGAGTTCGAGTACGTGCTGTCGAGTGGACTATAGAGTGTGTCGCGCGCGCAGA 761542

QY 541 TGGTGTGCGTGGCCACCGCATGATCCGTTCTCTGAGCAGCAGCAGCCAAACGTCGCC 600
Db 761543 TGGTGTGCGTGGCCACCGCATGATCCGTTCTCTGAGCAGCAGCAGCCAAACGTCGCC 761602

QY 601 TGATGGCGCCAAATGACGAGCCGCGGTTCGCTGCGTGGTGGCAGGAGCGCGCTGG 660
Db 761603 TGATGGCGCCAAATGACGAGCCGCGGTTCGCTGCGTGGTGGCAGGAGCGCGCTGG 761662

QY 661 TGGGACCCGATGAGCTGCGCGCGCGATTCGACGCGG 699
Db 761663 TGGGACCCGATGAGCTGCGCGCGCGATTCGACGCGG 761701

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RESULT 4

US-08-313-185-57

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; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-313-185-57

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Query Match      79.2%; Score 558.2; DB 2; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.7e-101;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 1124 CCCAGGACGTGGAGGCGATCACCGCAGACCCCTGATCAATATCCGTCAGTCGTGGCGG 1183

QY 61 CGATCAAGAGGATCTTTCGGCACAGCCAGCTGTGTCAGTTCATGGACCAAGAACCCCG 120
Db 1184 CTATCAAGGAATCTTTCGGCACAGCCAGCTGTGTCAGTTCATGGATCAGAACCCCTC 1243

QY 121 TGTCCGGGCTCACCCACAAGCGCGCTGTGCGCGCTGGCGCGCGGTGTCGTGTCGCCGG 180
Db 1244 TGTCCGGGCTCACCCACAAGCGCGCTGTGCGCGCTGGCGCGCGGTGTCGTGTCGCCGTG 1303

QY 181 AGCGGCGCGGCTGGAGTCCGCGAGCTGCACCCGTCGCCACTACGCGCGGATGTGCCGA 240
Db 1304 AGCGTCCGCGGCTAGAGTCCGCGAGCTGCACCCCTTCGCACTACGCGCGGATGTGCCGA 1363

QY 241 TCAGACCCCGGAGGTTCACCAATCGGTGTGATCGGTGTCGCTGTCGTCGTCGTCGCGGG 300
Db 1364 TCAGAGACTCCGAGGCGCGGAAACATAGGTCGTGTCGTCGTCGTCGTCGTCGTCGCGGG 1423

QY 301 TCACCCGCTCGGTTTCATCGAGCCCGCTACCGCAAGTGTGTCGAGCGGTGTCGTCGCGG 360
Db 1424 TCACCCCTTCGGGTTTCATCGAACCCTACCGCAAGTGTGTCGAGCGGTGTCGTCGCGG 1483

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Fri Aug 20 12:39:18 2004

us-09-285-306-6.rni

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361 ACAGATCACTACCTGACCGCGAGAGGAGACCGCCACGTCGTGGCGAGGCCAACT 420
1484 ACAGATCGATACCTGACCGCTGACGAGGAGAGACCGCCATGTCGTGGCGAGGCCAACT 1543
421 CGCCGATCGACGACGAGCGCGGTTCGGGAGGCGCGGTGTCGTGGCGGAGGCGG 480
1544 CGCCGATCGACGAGCGCGCGGTTCGTGGGAGGCGCGGTTCGTGGGAGGCGG 1603
481 GCGAGTCGAGTACGTCGCTCGTGGAGTGGAGTACATGAGACGTCGTGGCGCGCAGA 540
1604 GCGAGTCGAGTACGTCGCTCGTGGAGTGGAGTACATGAGTGTCTGCGCCAGCAGA 1663
541 TCGTGTGCGTGCACCGCGATGATCCCGTTCCTCGAGACGACGACGACCGTGCCTG 600
1664 TGGTGTGCGTGCACCGCGATGATCCCGTTCCTCGAGACGACGACGACCGTGCCTG 1723
601 TCGTGTGCGTGCACCGCGATGATCCCGTTCCTCGAGACGACGACGACCGTGCCTG 660
1724 TCGTGTGCGTGCACCGCGATGATCCCGTTCCTCGAGACGACGACGACCGTGCCTG 1783
661 TGGGACCGCGATGAGTCGCGCGCGCGATCGACGCGG 699
1734 TGGGACCGCGATGAGTCGCGCGCGCGATCGACGCGT 1822

RESULT 5
US-09-082-614A-57
; Sequence 57, Application US/09082614A
; Patent No. 6124098
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 56
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/082,614A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/313,185
; FILING DATE: 12-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
;
1284 ACAGATCGATACCTGACCGCTGACGAGGAGAGACCGCCATGTCGTGGCGAGGCCAACT 1343
421 CGCCGATCGACGACGAGCGCGGTTCGGGAGGCGCGGTGTCGTGGCGGAGGCGG 480
1544 CGCCGATCGACGAGCGCGCGGTTCGTGGGAGGCGCGGTTCGTGGGAGGCGG 1603
481 GCGAGTCGAGTACGTCGCTCGTGGAGTGGAGTACATGAGACGTCGTGGCGCGCAGA 540
1604 GCGAGTCGAGTACGTCGCTCGTGGAGTGGAGTACATGAGTGTCTGCGCCAGCAGA 1663
541 TCGTGTGCGTGCACCGCGATGATCCCGTTCCTCGAGACGACGACGACCGTGCCTG 600
1664 TGGTGTGCGTGCACCGCGATGATCCCGTTCCTCGAGACGACGACGACCGTGCCTG 1723
601 TCGTGTGCGTGCACCGCGATGATCCCGTTCCTCGAGACGACGACGACCGTGCCTG 660
1724 TCGTGTGCGTGCACCGCGATGATCCCGTTCCTCGAGACGACGACGACCGTGCCTG 1783
661 TGGGACCGCGATGAGTCGCGCGCGCGATCGACGCGG 699
1784 TGGGACCGCGATGAGTCGCGCGCGCGATCGACGCGT 1822

TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-09-082-614A-57
Query Match 79.2%; Score 558.2; DB 3; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.7e-101; Indels 0; Gaps 0;
Matches 611; Conservative
1 CCCAGGATGTCGAGCGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTCGGCG 60
1124 CCCAGGATGTCGAGCGGATCACACCGCAGACCCCTGATCAATATCCGTCGTCGGTCGCG 1183
61 CGATCAAGAGTTCCTTCGGCACCGACCGAGCTGTCAGTTCATGACACGACACACCCCG 120
1184 CTATCAAGAAATTCCTTCGGCACCGACCGAGCTGTCAGTTCATGATCAGACACACCCCTC 1243
121 TGTTCGGGCTTACCCACAGACCGCGCTGTCGCGCGTGGCGCGGTCGTCTGTTCGCCGG 180
1244 TGTTCGGGCTTACCCACAGACCGCGCTGTCGCGCGTGGCGCGGTCGTCTGTTCGCCGG 1303
181 AGCGGCGCGGCTTGGAGGTCGCGCACGTCGACCCCGTCCCACTACGCGCGGATGTGCCGA 240
1304 AGCGTCCCGGCTTAGAGGTCGTCGACGTCGACCCCTTCGCACTACGCGCGGATGTGCCGA 1363
241 TCGAGACCGCGGAGGTCGCCAATCGTCTGATCGGTCGCTGTCGTCGTCGTCGTCGTCG 300
1364 TCGAGACTCCGAGGCGCGGAAATAGTCTGATCGGTTCAATGTCGTCGTCGTCGTCGTCG 1423
301 TCACCGGTCGCGGTTTCATCGAGACCGCTTACCGCAAGTGGTCGACGCGTCGTCACCG 360
1424 TCACCGGTCGCGGTTTCATCGAAGACCGTACCGCAAGTGGTCGACGCGTCGTCACCG 1483
361 ACCAGATCCACTACCTGACCGCGCAGGAGGAGACCGCCACGTCGTGGCGCGCAGCCAACT 420
1484 ACCAGATCCACTACCTGACCGCGCAGGAGGAGACCGCCACGTCGTGGCGCGCAGCCAACT 1543
421 CGCCGATCGACGACGAGCGCGGTTCGGGAGGCGCGGTTCGTGGCGCGCGCGCGCGCGG 480
1544 CGCCGATCGACGAGCGCGCGGTTCGTGGGAGGCGCGGTTCGTGGCGCGCGCGCGCGCGG 1603
481 GCGAGTCGAGTACGTCGCTCGTGGAGTGGAGTACATGAGACGTCGTGGCGCGCGCAGA 540
1604 GCGAGTCGAGTACGTCGCTCGTGGAGTGGAGTACATGAGTGTCTGCGCCAGCAGA 1663
541 TGGTGTGCGTGCACCGCGATGATCCCGTTCCTCGAGACGACGACGACCGTCGTCGCC 600
1664 TGGTGTGCGTGCACCGCGATGATCCCGTTCCTCGAGACGACGACGACCGTCGTCGCC 1723
601 TCGTGTGCGTGCACCGCGATGATCCCGTTCCTCGAGACGACGACGACCGTGCCTG 660
1724 TCGTGTGCGTGCACCGCGATGATCCCGTTCCTCGAGACGACGACGACCGTGCCTG 1783
661 TGGGACCGCGATGAGTCGCGCGCGCGATCGACGCGG 699
1784 TGGGACCGCGATGAGTCGCGCGCGCGATCGACGCGT 1822

RESULT 6
US-08-250-030-1
; Sequence 1, Application US/08250030
; Patent No. 5643723
; GENERAL INFORMATION:
; APPLICANT: Persing, David H.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in
; TITLE OF INVENTION: Clinical Specimens
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA

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/ ZIP: 55402
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: PatentIn Release #1.0, Version #1.25
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/250,030
/ FILING DATE: 26-MAY-1994
/ CLASSIFICATION: 435
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Muetting, Ann M.
/ REGISTRATION NUMBER: 33,977
/ REFERENCE/DOCKET NUMBER: 150.105US1
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 612-339-0331
/ TELEFAX: 612-339-3061
/ INFORMATION FOR SEQ ID NO: 1:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 970 base pairs
/ TYPE: nucleic acid
/ STRANDEDNESS: single
/ TOPOLOGY: linear
/ MOLECULE TYPE: DNA
US-08-250-030-1

Query Match 76.7%; Score 540.4; DB 1; Length 970;
Best Local Similarity 91.1%; Pred. No. 5.1e-98;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGCGGATCACACCGCAGACACCTGATCAACATCCGTCACAGTCTGTGGCGG 60
Db 341 CCCAGGACGTGGAGCGGATCACACCGCAGAGTTGATCAACATCCGCCCGGTGTGTCGCG 400
QY 61 CGATCAAGGAGTCTTTCGGCACACGACAGCTGTCCCAGTTTCATGGACCAAGAAACAAACCCG 120
Db 401 CGATCAAGGAGTCTTTCGGCACACGACAGCTGTAGCCCAATTCATGGACCAAGAAACAAACCCG 460
QY 121 TGTCCGGGGCTCACCCACAAGCGCGCTGTGCGGCTGGGCGCGGTGTGTCTGTCCCGGG 180
Db 461 TGTCCGGGGTTGACCCACAAGCGCGGACTGTGCGCGCTGGGGCGCCGCGGTCTGTCACTG 520
QY 181 AGCGGCGCGGGCTGGAGGTCCGCGAGCTGCACCGCTCCCACTACGCGCGGATGTGCCCGA 240
Db 521 AGCGTGCGGGCTGGAGGAGCGGAGCGAGTGTCACCGCTGCACACCGCGCGGATGTGCCCGA 580
QY 241 TCCAGACCCCGGAGGTCCTCCAACTGCTGATGCGGTGCTGTGCTGTGATGCGCGGG 300
Db 581 TCGAAACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGACGCGCGG 640
QY 301 TCAACCCGTTCCGGGTTTCATCGAGACGCCGTACCGCAAGTGTGTGACGGCGTGTACCG 360
Db 641 TCAACCCGTTCCGGTTTCATCGAAACCCCGTACCGCAAGTGTGTGACGCGCTGTGTAGCG 700
QY 361 ACGAGATCCACTACTGACCGCCGACAGGAGGACCGCCACCTGTGTGGCGAGGCCAACT 420
Db 701 ACGAGATCGTGTACCTGACCGCCGACAGGAGGACCGCCACCTGTGTGGCGAGGCCAACT 480
QY 421 CGCCGATCGACACACAGGCGCGGTTCGCGAGGCCCGGTGCTGTGTCGCCCGCAAGCGGG 540
Db 761 CGCCGATCGATCGGACGCGTCCGTCGTCGAGCCGCGGTGCTGTGTCGCCCGCAAGCGGG 820
QY 481 GCGAGTTCGAGTACGTGCCCTCGTCCGAGGTGCGTACTGACAGCTGTGTCGCCCGCAGA 540
Db 821 GCGAGTTCGAGTACGTGCCCTCGTCTGAGGTGGACTACATGACAGCTGTGTCGCCCGCAGA 880
QY 541 TGGTGTCCGTGCGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGCCAACCGTGGCC 600
Db 881 TGGTGTCCGTGCGCCACCGCGATGATTCCTTCCTGGAGCAACGACGCCAACCGTGGCC 940
QY 601 TGATGGGCGCCAACTGACGAGCGCAGGCGG 630
Db 941 TCATGGGGCAACATGACGAGCGCAGGCGG 970

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Fri Aug 20 12:39:18 2004

701 ACAGATCGTGTACCTGACCCCGACGAGGAGGACCGCCACGTGTGGCACAGGCCAATT 760
 421 CGCCGATCGACACAGGCGCGGTTCGCGAGGCGCCGGTGTGTCTCGCCGCAAGGCGG 480
 761 CGCCGATCGATGCGGACCGTTCGTCGAGCGCGCGTGTGTCTCGCCGCAAGGCGG 820
 481 GCGAGGTGAGTACGTCGCTCGTCCGAGGTGAGTACATGACGTGTGCGCGCCGAGA 540
 821 GCGAGGTGAGTACGTCGCTCGTCTGAGGTGAGTACATGAGACGTCTCGCCCGCCAGA 880
 541 TGGTGTGCGTCCGACCGCGATGATCCGTCCTCGAGCAGCAGCAGCAGCAGCAGCAGC 600
 881 TGGTGTGCGTCCGACCGCGATGATTCCTCTGAGCAGCAGCAGCAGCAGCAGCAGCAGC 940
 601 TCATGGGCGCAACATGACGCGCCAGGCGG 630
 941 TCATGGGCGCAACATGACGCGCCAGGCGG 970

RESULT 8

US-08-757-653-135
 ; Sequence 135, Application US/08757653
 ; Patent No. 5843669
 ; GENERAL INFORMATION:
 ; APPLICANT: Kaiser, Michael W.
 ; APPLICANT: Lyamichev, Victor I.
 ; APPLICANT: Lyamichev, Natasha
 ; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
 ; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
 ; NUMBER OF SEQUENCES: 190
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Medlen & Carroll, LLP
 ; STREET: 220 Montgomery Street, Suite 2200
 ; CITY: San Francisco
 ; STATE: California
 ; COUNTRY: United States Of America
 ; ZIP: 94104
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/757,653
 ; FILING DATE:
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Ingolia, Diane E.
 ; REGISTRATION NUMBER: 40,027
 ; REFERENCE/DOCKET NUMBER: FORS-02565
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 705-8410
 ; TELEFAX: (415) 397-8338
 ; INFORMATION FOR SEQ ID NO: 135:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 620 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: double
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: DNA (genomic)
 ; US-08-757-653-135
 Query Match 75.2%; Score 530.4; DB 2; Length 620;
 Best Local Similarity 91.0%; Pred. No. 4.6e-96;
 Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;
 36 ATCAACATCCGTCAGTCTGCGGCGGATCAAGGAGTCTTCGGCACCAGCCAGCTGTCC 95
 1 ATCAACATCCGCGCGGTGTGCGCGATCAAGGAGTCTTCGGCACCAGCCAGCTGACG 60
 96 GAGTTTCATGACGACAGCAACCGGTGTGCGGCGCTCACCCACAAAGCGCGCTGTGCGG 155
 61 CAATTTCATGACGACAGCAACCGGTGTGCGGCGTGTGCGGCGTGTGCGGCGG 120

156 CTGGGCGCGGTGTCTGTCTCCCGGAGCGGGCCGGGTGGAGGTCCGCGACGTGACCGCG 215
 121 CTGGGCGCGCGGTCTGTACGTGAGCGTCCCGGGCTGGAGTCCGCGACGTGACCGCG 180
 216 TCCACATACGCGCGGATGTGCGCGATCGAGACCGCGGAGGTCCCAACATCGGTCTGATC 275
 181 TCGCACTACGCGCGGATGTGCGCGATCGAAACCGCTGAGGGGCCCAACATCGGTCTGATC 240
 276 GGCTCGCTGTGCTGTATGCGCGGTCAACCGTTTCGGGTTTCATCGAGACGCGGTACCGC 335
 241 GGCTCGCTGTGCTGTACGCGCGGTCAACCGTTTCGGGTTTCATCGAAACCGGTACCGC 300
 336 AAGGTGTGCGCGGTGTCAACCGACGAGATTCCTACTGACCGCGCGACGAGGAGGAC 395
 301 AAGGTGTGCGCGGTGTGAGCGACGAGATCGTGTACTGACCGCGCGACGAGGAGGAC 360
 396 CGCCACGTGTGCGCGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 455
 361 CGCCACGTGTGCGCGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 420
 456 CGGCTGTGCTGCGCGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 515
 421 CGGCTGTGCTGCGCGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 480
 516 TACATGAGCGTGTGCGCGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 575
 481 TACATGAGCGTGTGCGCGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 540
 576 GAGCAGCAGCGCGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 635
 541 GAGCAGCAGCGCGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 600
 636 CTGCTGCGCGAGCGAGGCGCG 655
 601 CTGCTGCGTAGCGAGGCGCG 620

RESULT 9

US-08-757-653-138/c
 ; Sequence 138, Application US/08757653
 ; Patent No. 5843669
 ; GENERAL INFORMATION:
 ; APPLICANT: Kaiser, Michael W.
 ; APPLICANT: Lyamichev, Victor I.
 ; APPLICANT: Lyamichev, Natasha
 ; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
 ; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
 ; NUMBER OF SEQUENCES: 190
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Medlen & Carroll, LLP
 ; STREET: 220 Montgomery Street, Suite 2200
 ; CITY: San Francisco
 ; STATE: California
 ; COUNTRY: United States Of America
 ; ZIP: 94104
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/757,653
 ; FILING DATE:
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Ingolia, Diane E.
 ; REGISTRATION NUMBER: 40,027
 ; REFERENCE/DOCKET NUMBER: FORS-02565
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 705-8410
 ; TELEFAX: (415) 397-8338
 ; INFORMATION FOR SEQ ID NO: 138:

SEQUENCE CHARACTERISTICS:
 LENGTH: 620 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 US-08-757-653-138

Query Match 75.2%; Score 530.4; DB 2; Length 620;
 Best Local Similarity 91.0%; Pred. No. 4.6e-96;
 Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY	36	ATCAACATCCGTCAGTCTGTCGGCGGATCAAGAGTTCTTCGGCACCGACGCTGTCC	95
Db	620	ATCAACATCCGTCAGTCTGTCGGCGGATCAAGAGTTCTTCGGCACCGACGCTGTCC	561
QY	96	CAGTTTCATGACACAGAACCGCTGTCGGGGCTCACCAAGCGCCCTGTTCGGCG	155
Db	560	CAATTTCATGACACAGAACCGCTGTCGGGGTTGACCAAGCGCCGCTGTTCGGCG	501
QY	156	CTGGGCGCGGCTGTCTGTCGGGAGCGGGCTGGAGTTCGGACGCTGTTCGGCG	215
Db	500	CTGGGCGCGGCTGTCTGTCGGGAGCGGGCTGGAGTTCGGACGCTGTTCGGCG	441
QY	216	TCCCACTAGCGCGGATGTCGGGATCGAGACCCCGGAGGTTCCAAATCGGTCTGATC	275
Db	440	TCGCACTAGCGCGGATGTCGGGATCGAGACCCCGGAGGTTCCAAATCGGTCTGATC	381
QY	276	GGCTCGCTGTGCTGTATGCGGGGTCAACCGTTTCGGGTTTCATCGAGCGCGTACCG	335
Db	380	GGCTCGCTGTGCTGTATGCGGGGTCAACCGTTTCGGGTTTCATCGAGCGCGTACCG	321
QY	336	AAGTGTGTGACGCGGTGTTCACGACGAGATCCACTACCTGACCGCGGAGGTCGGG	395
Db	320	AAGTGTGTGACGCGGTGTTCACGACGAGATCCACTACCTGACCGCGGAGGTCGGG	261
QY	396	CGCCACGCTGTGGCGGAGGCGCAATCTGCGGATCGACGACGAGGAGGAC	455
Db	260	CGCCACGCTGTGGCGGAGGCGCAATCTGCGGATCGACGACGAGGAGGAC	201
QY	456	CGGTGTGTGTCGCGGCGGAGGCGGAGTTCAGTACGTCGCTGTTCGAGGCGG	515
Db	200	CGGTGTGTGTCGCGGCGGAGGCGGAGTTCAGTACGTCGCTGTTCGAGGCGG	141
QY	516	TACATGACGCTGTGCGCGCGGATGTCGGTGGCCACCGGATGATCCCGTCTCTC	575
Db	140	TACATGACGCTGTGCGCGCGGATGTCGGTGGCCACCGGATGATCCCGTCTCTC	81
QY	576	GAGCAGACGACGCGGATGTCGGTGGCCACCGGATGATCCCGTCTCTC	635
Db	80	GAGCAGACGACGCGGATGTCGGTGGCCACCGGATGATCCCGTCTCTC	21
QY	636	CTGGTCCGACGAGGCGCC 655	
Db	20	CTGGTCCGACGAGGCGCC 1	

RESULT 10
 US-08-520-946-135
 Sequence 135, Application US/08520946
 Patent No. 6372424
 GENERAL INFORMATION:
 APPLICANT: BROW, MARY ANN D.
 APPLICANT: LYAMICHEV, VICTOR I.
 APPLICANT: OLIVE, DAVID M.
 TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
 TITLE OF INVENTION: PATHOGENS
 NUMBER OF SEQUENCES: 160
 CORRESPONDENCE ADDRESS:
 ADDRESS: MEDLEN & CARROLL
 STREET: 220 MONTGOMERY STREET, SUITE 2200
 CITY: SAN FRANCISCO
 STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/520,946
 FILING DATE:
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: CARROLL, PETER G.
 REGISTRATION NUMBER: 32,837
 REFERENCE/DOCKET NUMBER: FORS-01756
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 135:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 620 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: double
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 US-08-520-946-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;
 Best Local Similarity 91.0%; Pred. No. 4.6e-96;
 Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY	36	ATCAACATCCGTCAGTCTGTCGGCGGATCAAGAGTTCTTCGGCACCGACGCTGTCC	95
Db	1	ATCAACATCCGTCAGTCTGTCGGCGGATCAAGAGTTCTTCGGCACCGACGCTGTCC	60
QY	96	CAGTTTCATGACACAGAACCGCTGTCGGGGTTCACCAAGCGCGCTGTTCGGCG	155
Db	61	CAATTTCATGACACAGAACCGCTGTCGGGGTTGACCAAGCGCGCTGTTCGGCG	120
QY	156	CTGGGCGCGGCTGTCTGTCGGGAGCGGGCTGGAGTTCGGGAGCGCTGTTCGGCG	215
Db	121	CTGGGCGCGGCTGTCTGTCGGGAGCGGGCTGGAGTTCGGGAGCGCTGTTCGGCG	180
QY	216	TCCCACTAGCGCGGATGTCGGGATCGAGACCCCGGAGGTTCCAAATCGGTCTGATC	275
Db	181	TCCCACTAGCGCGGATGTCGGGATCGAGACCCCGGAGGTTCCAAATCGGTCTGATC	240
QY	276	GGCTCGCTGTGCTGTATGCGGGTTCACCGGATGATCCCGTTCGGGTTTCATCGAG	335
Db	241	GGCTCGCTGTGCTGTATGCGGGTTCACCGGATGATCCCGTTCGGGTTTCATCGAG	300
QY	336	AAGTGTGTGACGCGGTGTTCACGACGAGATCCACTACCTGACCGCGGAGGAC	395
Db	301	AAGTGTGTGACGCGGTGTTCACGACGAGATCCACTACCTGACCGCGGAGGAC	360
QY	396	CGCCACGCTGTGGCGGAGGCGCAATCTGCGGATCGACGACGAGGAGGAC	455
Db	361	CGCCACGCTGTGGCGGAGGCGCAATCTGCGGATCGACGACGAGGAGGAC	420
QY	456	CGGTGTGTGTCGCGGCGGAGGCGGAGTTCAGTACGTCGCTGTTCGAGGCGG	515
Db	421	CGGTGTGTGTCGCGGCGGAGGCGGAGTTCAGTACGTCGCTGTTCGAGGCGG	480
QY	516	TACATGACGCTGTGCGCGCGGATGTCGGTGGCCACCGGATGATCCCGTCTCTC	575
Db	481	TACATGACGCTGTGCGCGCGGATGTCGGTGGCCACCGGATGATCCCGTCTCTC	540
QY	576	GAGCAGACGACGCGCAACCGTCCCTGTATGGGCGGCAACATCAGCGCGGCTTCG	635
Db	541	GAGCAGACGACGCGCAACCGTCCCTGTATGGGCGGCAACATCAGCGCGGCTTCG	600
QY	636	CTGGTCCGACGAGGCGCC 655	

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Db      601 CTGTCCTAGCAGAGGCC 620

RESULT 11
US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-138

Query Match      75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 4.6e-96;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY      36 ATCAACATCCGTCAGTGGCGGCGGATCAAGAGTTCTTCGGCACCAGCGACTGTCC 95
Db      620 ATCAACATCCGCGGTGGTCCGCGATCAAGAGTTCTTCGGCACCAGCGACTGAGC 561

QY      96 CAGTTATGACACAGAACCCCGTCTCGGGCTCACCCACAGCGCGCTGTCCGCG 155
Db      560 CAATTATGACACAGAACCCCGTCTCGGGTTGACCCACAGCGCGCTGTCCGCG 501

QY      156 CTGGCGCGGGTGTCTCTCCGGAGCGGGCGGGTGGAGTCCGCGACGTGCACCG 215
Db      500 CTGGGGCCGGCGGTCTGTACGTGAGGTGCGGGGTGGAGTCCGCGACGTGCACCG 441

QY      216 TCCCACTACGCCGGATGTCGGATCGAGACCCCGGAGGGTCCCAACATCGTCTGATC 275
Db      440 TCGCACTACGCCGGATGTCGGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 381

QY      276 GGCTCGCTGTGCTGTATGCGGGGTCAACCGTTTCGCGTTCATCGAGCCGCTACCGC 335
Db      380 GGCTCGCTGTGCTGTATGCGGGGTCAACCGGTTCGCGTTCATCGAAACCGCTACCGC 321

QY      336 AAGTGGTTCGACGGGTGTGTACCCAGCAGATCCACTACCTACCGCCGACGAGGAGAC 395
Db      320 AAGTGGTTCGACGGGTGTGTAGCGACGAGATCGTGTACCTGACCGCCGACGAGGAGAC 261

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RESULT 12
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match      75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 4.6e-96;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY      36 ATCAACATCCGTCAGTGGCGGCGGATCAAGAGTTCTTCGGCACCAGCGACTGTCC 95
Db      1 ATCAACATCCGCGGTGGTCCGCGATCAAGAGTTCTTCGGCACCAGCGACTGAGC 60

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QY 96 CAGTTCATGACACGAAACAACCCGCTGTGCGGGTCAACCCACAGCGCCGCTGTGCGG 155
Db 61 CAATTATGACACGAAACAACCCGCTGTGCGGGTGAACCCACAGCGCCGCTGTGCGG 120
QY 156 CTGGGCGCGGCTGTGCTGTCGCGGAGCGCGCGGCTGAGGTCCGCGACGTGCAACCG 215
Db 121 CTGGGCGCGGCTGTGCTGTCGCGGAGCGCGCGGCTGAGGTCCGCGACGTGCAACCG 180
QY 216 TCCCACTACGCGCGGATGTCCCGATCGACACCCCGAGGAGTCCCAACATCGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTCCCGATCGACACCCCGAGGAGTCCCAACATCGTCTGATC 240
QY 276 GCGTCGCTGTGCTGTATGCGCGGGTCAACCCGCTGTGCGGGTTCATCGAGAGCGCGTACC 335
Db 241 GCGTCGCTGTGCTGTATGCGCGGGTCAACCCGCTGTGCGGGTTCATCGAGAGCGCGTACC 300
QY 336 AAGGTGGTGCAGCGGCTGTCAACCGAGGATCCACTACTGACCGCGACGAGGAGGAC 395
Db 301 AAGGTGGTGCAGCGGCTGTCAACCGAGGATCCACTACTGACCGCGACGAGGAGGAC 360
QY 396 CGCCACGTGGTGGCGGAGCGGCGGAGTGCAGTACGTGCGCTCGTCCGAGGTGGAC 515
Db 361 CGCCACGTGGTGGCGGAGCGGCGGAGTGCAGTACGTGCGCTCGTCCGAGGTGGAC 480
QY 456 CGGTGCTGTGCTGCGCGGCGGAGTGCAGTACGTGCGCTCGTCCGAGGTGGAC 515
Db 421 CGGTGCTGTGCTGCGCGGCGGAGTGCAGTACGTGCGCTCGTCCGAGGTGGAC 480
QY 516 TACATGAGCTGTGCGCGGCGGAGTGCAGTACGTGCGCTCGTCCGAGGTGGAC 575
Db 481 TACATGAGCTGTGCGCGGCGGAGTGCAGTACGTGCGCTCGTCCGAGGTGGAC 540
QY 576 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 635
Db 541 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 600
QY 636 CTGGTGGCAGCAGGCGGCC 655
Db 601 CTGGTGGCAGCAGGCGGCC 620

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RESULT 13

US-09-655-378A-138/c

Sequence 138, Application US/09655378A

Patent No. 6673616

GENERAL INFORMATION:

APPLICANT: BROW, MARY ANN D.

LYAMICHEV, VICTOR I.

OLIVE, DAVID M.

TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

PATHOGENS

NUMBER OF SEQUENCES: 165

CORRESPONDENCE ADDRESS:

ADDRESSEE: MEDLEN & CARROLL

STREET: 220 MONTGOMERY STREET, SUITE 2200

CITY: SAN FRANCISCO

STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA

ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA: US/09/655,378A

FILING DATE: 05-Sep-2000

CLASSIFICATION: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: CARROLL, PETER G.

REGISTRATION NUMBER: 32,837

REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 138:

SEQUENCE CHARACTERISTICS:

LENGTH: 620 base pairs

TYPE: nucleic acid

STRANDEDNESS: double

TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)

SEQUENCE DESCRIPTION: SEQ ID NO: 138:

US-09-655-378A-138

Query Match

Best Local Similarity 91.0%; Pred. No. 4.6e-96; Length 620;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

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QY 36 ATCAACATCCGTCCAGTCTGTCGCGCGATCAAGGAGTTCTTCGGCACCAAGCCAGCTGTCC 95
Db 620 ATCAACATCCGCGCGTGTGTCGCGCGATCAAGGAGTTCTTCGGCACCAAGCCAGCTGTCC 561
QY 96 CAGTTTCATGCGACCAAGCAACCCGCTGTGCGGGTCAACCCCAAGCGCGCTGTGCGG 155
Db 560 CAAATTCATGCGACCAAGCAACCCGCTGTGCGGGTTCACCCCAAGCGCGCTGTGCGG 501
QY 156 CTGGGCCCGGGTGTCTGTCTCCCGGAGCGGCGCGGCTGGAGGTCCGCGAGTGCACCG 215
Db 500 CTGGGGCCCGGGTGTCTGTCTCAGTGAGGTGCGGGCTGGAGGTCCGCGAGTGCACCG 441
QY 216 TCCCACTAGCGCGGATGTGCCGATCGAGACCCCGAGGGTCCCAACATCGTCTGATC 275
Db 440 TCGCACTAGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 381
QY 276 GGCTCGCTGTGCGGTATGCGCGGGTCAACCCGTTGCGGTTTCATCGACGCCGTTACCG 335
Db 380 GGCTCGCTGTGCGGTATGCGCGGGTCAACCCGTTGCGGTTTCATCGAAACCCGTTACCG 321
QY 336 AAGTGTGTCAGCGCGTGTCTACCGACGAGATCCACTACCTGACGCGCGACGAGAGGAC 395
Db 320 AAGTGTGTCAGCGCGTGTGTAGCGACGAGATCGTGTACCTGACCGCGACGAGAGGAC 261
QY 396 CGCCACGTGTGGCGCAGGCGCAACTCCCGATCGACACCAAGGGCCGCTTCGCGAGGCC 455
Db 260 CGCCACGTGTGGCGCAGGCGCAATTCGCCGATCGATCGGACGCTCGCTTCGTCGAGCCG 201
QY 456 CGGTGTGTGTCGCGCGCAAGCGCGGAGTGCAGTACGTGCCCTCGTCCGAGGTGGAC 515
Db 200 CGGTGTGTGTCGCGCGCAAGCGCGGAGTGCAGTACGTGCCCTCGTTCGAGGTGGAC 141
QY 516 TACATGAGCTGTGCGCGCGCAGATGTTGTCGTTGGCCACCGCATGATCCGTTCTC 575
Db 140 TACATGAGCTGTGCGCGCGCAGATGTTGTCGTTGGCCACCGCATGATTCGCTTCCTG 81
QY 576 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 635
Db 80 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 61
QY 636 CTGGTGGCAGCAGGCGGCC 655
Db 20 CTGGTGGCAGCAGGCGGCC 1

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RESULT 14

US-08-757-653-136

Sequence 136, Application US/08757653

Patent No. 5843689

GENERAL INFORMATION:

APPLICANT: Kaiser, Michael W.

APPLICANT: Lyamichev, Victor I.

APPLICANT: Lyamichev, Natasha

TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

TITLE OF INVENTION: Thermostable FEN-1 Endonucleases

NUMBER OF SEQUENCES: 190

```

CORRESPONDENCE ADDRESS:
ADDRESS: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 136:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-136

Query Match          75.0%;   Score 528.8;   DB 2;   Length 620;
Best Local Similarity 90.8%;   Pred. No. 9.4e-96;
Matches 563;   Conservative 0;   Mismatches 57;   Indels 0;   Gaps 0;

QY      36  ATCAACATCCGTCAGTCTGTGCGCGCATCAAGAGATCTTCGGCACACGACAGCTGTCC 95
DB      1  ATCAACATCCGCGCGGTGTGCGCGCATCAAGAGATCTTCGGCACACGACAGCTGTGCGCG 60

QY      96  CAGTTCATGGACCAAGAACACCCGCTGTGCGGGTCAACCAAGCGCGCTTCGCGG 155
DB      61  CAATTATGGACCAAGAACACCCGCTGTGCGGGTGTGACTACAAAGCGCGACTGTGCGCG 120

QY      156  CTGGCGCCGGTGTCTGTCCCGAGCGCGGCTTGGAGGTTCGGGACGTGCACCG 215
DB      121  CTGGCGCCGGCGGTCTGTACGTGAGCGTGTGCGGGCTGGAGTTCGCGAGCTGCACCG 180

QY      216  TCCCACTACGCGCGATGTGCCGATCAGACCCCGAGGTCACCAATCGTCTGATC 275
DB      181  TCGCACTACGCGCGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 240

QY      276  GCCTCGCTGTGGTGTATGCGCGGTCAACCGTTCCGGTTCATCGAGACGCGTACC 335
DB      241  GCCTCGCTGTGGTGTATGCGCGCGGTCAACCGTTCCGGTTCATCGAAAGCGGTACC 300

QY      336  AAGGTGGTTCGACGCGGTGTCTACCGACGAGATCCACTACTGACGCGCGACAGAG 395
DB      301  AAGGTGGTTCGACGCGGTGTAGCGACGAGATCGTGTACTGACCGCGCGACAGAGG 360

QY      396  CGCCACGTGTGCGCGAGCGCAACTCGCGATCGACGACAAAGGCGCGTTCGCGAGG 455
DB      361  CGCCACGTGTGCGCACAGGCAATTCGCGATCGATGCGGACGCGTTCGTCGAGCGG 420

QY      456  CGGGTCTGTCGCGCGCAAGCGCGGCGAGGTTCGATGTCGCTTCGTCCGAGTGGAC 515
DB      421  CGGGTCTGTCGCGCGCAAGCGCGGCGAGGTTCGATGTCGCTTCGTTCGAGTGGAC 480

QY      516  TACATGGAAGTGTGCGCGCGCAAGATGGTGTGCGGTGGCCACCGCGATGATCCG 575
DB      481  TACATGGAAGTGTGCGCGCGCAAGATGGTGTGCGGTGGCCACCGCGATGATTCCT 540

QY      576  GAGCACGACGACCAACCGTGCCTGATGGCGCCCAACATGCGAGCGCCAGGCGGT 635

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541 GAGCAGCAGCAGCGCAACGTCCTCATGGGGGCAAAATGTCAGCGCCAGCGGTGCCG 600
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636 CTGGTCGCGAGCGAGCGCC 655
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601 CTGGTCGTCGTCAGCGAGGCC 620
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RESULT 15
US-08-757-653-137
; Sequence 137, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W. I.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 137:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-137

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	Query Match	75.0%;	Score 528.8;	DB 2;	Length 620;
	Best Local Similarity	90.8%;	Pred. No. 9.4e-96;		
	Matches 563;	Conservative	0;	Mismatches 57;	Indels 0;
				Gaps	0;
QY	36	ATCAACATCCGTC	CCGATCGTGGCGGCATCAAGGAGTTC	TCGGCACACGACGAGTGC	95
Db	1	ATCAACATCGGC	CGGTGTCGCGCGATCAAGGAGTTC	TCGGCACACGACGAGTGC	60
QY	96	CAGTTATGACAC	GAGAACACCCGCTGTCGGGGCTCACCCAAAGCGCGC	CTGTGCGGC	155
Db	61	CAATTATGACAC	GAGAACACCCGCTGTCGGGGTTCACCCAAAGCGCGC	CTGTGCGGC	120
QY	156	CTGGGGCCCGGT	GTGTGTCTCCCGGAGCGGGCGCGGCTGGAGGT	CCGACGTCACCG	215
Db	121	CTGGGGCCCGGT	GTGTGTCACTGAGCGTGTCCGGGTGAGGT	CCGACGTCACCG	180
QY	216	TCCCACTACGCC	CGGATGTGCCCGATCGACACCCCGAGGTC	CCCAACATCGTCTGATC	275
Db	181	TCGCACTACGCC	CGGATGTGCCCGATCGAAACCCCTGAGGGGCC	CAACATCGTCTGATC	240
QY	276	GGCTCGGTGTC	GGTGTATCGCGGGTCAACCCGTTCGGGTTC	ATCGAGACGCGGTACCG	335

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Job time : 80.4446 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 14:25:11 ; Search time 407.972 Seconds
(without alignments)
8488.468 Million cell updates/sec

Title: US-09-285-306-6

Perfect score: 705

Sequence: 1 cccaggacgtgagcgatc.....ggcgatcgacgcgagcgt 705

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 3228839 seqs, 2456066551 residues

Total number of hits satisfying chosen parameters: 6457678

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Published Applications NA:*

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19: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq.*

20: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	705	100.0	705	9	US-09-285-306-4
2	705	100.0	705	9	US-09-285-306-5
3	705	100.0	705	9	US-09-285-306-6
4	705	100.0	705	9	US-09-285-306-7
5	705	100.0	705	9	US-09-285-306-8
6	705	100.0	705	9	US-09-285-306-9
7	705	100.0	705	9	US-09-285-306-10
8	705	100.0	705	9	US-09-285-306-11
9	705	100.0	705	9	US-09-285-306-12
10	705	100.0	705	9	US-09-285-306-13
11	705	100.0	705	9	US-09-285-306-14
12	705	100.0	705	9	US-09-285-306-15
13	703.4	99.8	705	9	US-09-285-306-16
14	693.4	98.6	705	9	US-09-285-306-17
15	693.4	98.4	705	9	US-09-285-306-18

15	691	98.0	705	9	US-09-285-306-10	Sequence 10, Appl
16	691	98.0	3444	13	US-10-282-122A-25737	Sequence 25737, A
17	687	97.4	687	9	US-09-285-306-18	Sequence 18, Appl
18	687	97.4	687	9	US-09-285-306-19	Sequence 19, Appl
19	687	97.4	687	9	US-09-285-306-20	Sequence 20, Appl
20	687	97.4	687	9	US-09-285-306-21	Sequence 21, Appl
21	687	97.4	687	9	US-09-285-306-22	Sequence 22, Appl
22	687	97.4	687	9	US-09-285-306-23	Sequence 23, Appl
23	687	97.4	687	9	US-09-285-306-24	Sequence 24, Appl
24	687	97.4	687	9	US-09-285-306-25	Sequence 25, Appl
25	660.2	93.6	705	9	US-09-285-306-26	Sequence 26, Appl
26	658.6	93.4	705	9	US-09-285-306-27	Sequence 27, Appl
27	655.4	93.0	705	9	US-09-285-306-28	Sequence 28, Appl
28	655.4	93.0	705	9	US-09-285-306-29	Sequence 29, Appl
29	655.4	93.0	705	9	US-09-285-306-30	Sequence 30, Appl
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31	655.4	93.0	705	9	US-09-285-306-32	Sequence 32, Appl
32	653.8	92.7	705	9	US-09-285-306-33	Sequence 33, Appl
33	653.8	92.7	705	9	US-09-285-306-34	Sequence 34, Appl
34	653.8	92.7	705	9	US-09-285-306-35	Sequence 35, Appl
35	653.8	92.7	705	9	US-09-285-306-36	Sequence 36, Appl
36	653.8	92.7	705	9	US-09-285-306-37	Sequence 37, Appl
37	652.2	92.5	705	9	US-09-285-306-38	Sequence 38, Appl
38	652.2	92.5	705	9	US-09-285-306-39	Sequence 39, Appl
39	652.2	92.5	705	9	US-09-285-306-40	Sequence 40, Appl
40	652.2	92.5	705	9	US-09-285-306-41	Sequence 41, Appl
41	642.2	91.1	687	9	US-09-285-306-42	Sequence 42, Appl
42	642.2	91.1	687	9	US-09-285-306-43	Sequence 43, Appl
43	637.4	90.4	687	9	US-09-285-306-44	Sequence 44, Appl
44	635.8	90.2	687	9	US-09-285-306-45	Sequence 45, Appl
45	635.8	90.2	687	9	US-09-285-306-46	Sequence 46, Appl

ALIGNMENTS

RESULT 1

US-09-285-306-4

; Sequence 4, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gigeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 4

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-4

Query Match	100.0%	Score	705	DB	9	Length	705
Best Local Similarity	100.0%	Pred. No.	2.1e-154				
Matches	705	Conservative	0	Mismatches	0	Gaps	0
Indels	0						
QY	1	CCCAGGACGTGGAGCGCATCACCGACACCTGATCAACATCCGTCAGTCGTGGCGG	60				
DB	1	CCCAGGACGTGGAGCGCATCACCGACACCTGATCAACATCCGTCAGTCGTGGCGG	60				
QY	61	CGATCAAGAGTTCCTGGCCACCGACAGCTGTCCAGTTCATGGACCAAGAACCCCG	120				
DB	61	CGATCAAGAGTTCCTGGCCACCGACAGCTGTCCAGTTCATGGACCAAGAACCCCG	120				
QY	121	TGTCGGGGCTCACCAAGCGCCCTGTGGCGCTGGCGCGGTGTGTGTGTGTGTGTGTGT	180				
DB	121	TGTCGGGGCTCACCAAGCGCCCTGTGGCGCTGGCGCGGTGTGTGTGTGTGTGTGTGT	180				

Qy	181	AGCGGCGCGGCTGGAGGTCGCGAGCTGACCCGTCCTCCACTACGCGCGGATGTGCCCGA	240
Db	181	AGCGGCGCGGCTGGAGGTCGCGAGCTGCACCCCTCCCACTACGCGCGGATGTGCCCGA	240
Qy	241	TCGAGACCCCGGAGGTCCTCCAAATCGGTCTGATCGGTCGCTGTGCGTGTATGCGCGG	300
Db	241	TCGAGACCCCGGAGGTCCTCCAAATCGGTCTGATCGGTCGCTGTGCGTGTATGCGCGG	300
Qy	301	TCAACCCGTTCCGGGTTTCATCGAGCGCGGTTACGCGAGGTCGTCGACGCGGTGTCACCG	360
Db	301	TCAACCCGTTCCGGGTTTCATCGAGCGCGGTTACGCGAAGGTGGTCGACGCGGTGTCACCG	360
Qy	361	ACGAGATCCACTACTCGACCGCGAGGAGGACCGCCACGTGGTGGCGCAGGCCAACT	420
Db	361	ACGAGATCCACTACTCGACCGCGAGGAGGACCGCCACGTGGTGGCGCAGGCCAACT	420
Qy	421	CGCGGATCGACGACAAGGGCGGGTTCCGAGAGCGCGGGTCTGGTCCGCGCAAGGCG	480
Db	421	CGCGGATCGACGACAAGGGCGGGTTCCGAGAGCGCGGGTCTGGTCCGCGCAAGGCG	480
Qy	481	CGAGGTCGAGTACGTGCGCTTCGCCAGGTGGACTACATGGACGTGTCCCGCGCGCAGA	540
Db	481	CGAGGTCGAGTACGTGCGCTTCGCCAGGTGGACTACATGGACGTGTCCCGCGCGCAGA	540
Qy	541	TGGTGTCCGTCGCGCACCGCGATGATCCGTTCTTCGAGCAAGACGCGCAACCGTGC	600
Db	541	TGGTGTCCGTCGCGCACCGCGATGATCCGTTCTTCGAGCAAGACGCGCAACCGTGC	600
Qy	601	TGATGGGCGCCAAATGACGCGCGAGCGGTTCCGCTGGTTCGCGAGCGAGGCGCCGCTGG	660
Db	601	TGATGGGCGCCAAATGACGCGCGAGCGGTTCCGCTGGTTCGCGAGCGAGGCGCCGCTGG	660
Qy	661	TGGGACCGGATGAGGCTGGCGCGCGATCGACGCGGACGCT	705
Db	661	TGGGACCGGATGAGGCTGGCGCGCGATCGACGCGGACGCT	705

```

RESULT 2
US-09-285-306-5
; Sequence 5, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 5
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-5

Query Match          100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0

QY      1  CCCAGGACGTGGAGCGCATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db      1  CCCAGGACGTGGAGCGCATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60

QY      61  CGATCAAGGAGTTCTTTCGGCACCAAGCCAGCTGTCCCAGTTTCATGGACCAAGAAACACCCGC 120
Db      61  CGATCAAGGAGTTCTTTCGGCACCAAGCCAGCTGTCCCAGTTTCATGGACCAAGAAACACCCGC 120

```

121	DB	TTGTCGGGGTCA	CCCCAAAGCGCGCGCTGTCGGCGCTGGCCCGGGTGGTCTGTCTCCCGGG	180
181	QY	AGCGGCGCGGCT	TGGAGGTCCGGACGTGCACCCGTCCCACTACGCGCGGATGTGCCCGA	240
181	DB	AGCGGCGCGGCT	TGGAGTCCGGACGTGCACCCGTCCCACTACGCGCGGATGTGCCCGA	240
241	QY	TCGAGACCCCGG	AGGGTCCAAATCATGGTGTGATCGGCTCGCTCTGATGTCGCGGG	300
241	DB	TCGAGACCCCGG	AGGGTCCAAATCATGGTGTGATCGGCTCGCTCTGATGTCGCGGG	300
301	QY	TCAACCCGTT	TCGGTTTCATCGACAGCGCGTACCGCAAGTGTGTGCACGGGTGTGTACCG	360
301	DB	TCAACCCGTT	TCGGTTTCATCGACAGCGCGTACCGCAAGTGTGTGCACGGGTGTGTACCG	360
361	QY	ACGAGATCCACT	ACTACCGCGACGAGAGGACCGCCACGTGGTGGCGCAGGCCAACT	420
361	DB	ACGAGATCCACT	ACTACCGCGACGAGAGGACCGCCACGTGGTGGCGCAGGCCAACT	420
421	QY	CGCCGATCGAC	ACAAGGCGGTTCCGGAGGCGCGGTCTGTCTCCGCGCGCAGGCGG	480
421	DB	CGCCGATCGAC	ACAAGGCGCGTTCCGGAGGCGCGGTCTGTCTCCGCGCGCAGGCGG	480
481	QY	CGGAGGTCGAGT	ACGTGCGCTTCGTCGAGGTGGACTACATGACGTGTGCGCGCGCCAGA	540
481	DB	CGGAGGTCGAGT	ACGTGCGCTTCGTCGAGGTGGACTACATGACGTGTGCGCGCGCCAGA	540
541	QY	TGGTGTGCGT	GGCCACCGCATGATCCGTTCTCTGAGCAGACGACGCAACCGTGCCC	600
541	DB	TGGTGTGCGT	GGCCACCGCATGATCCGTTCTCTGAGCAGACGACGCAACCGTGCCC	600
601	QY	TGATGGGCGCAA	ATGTCAGCGGCCAGGCGGTTCCGCTGGTGTGCGCAGGAGGCGCGCTGG	660
601	DB	TGATGGGCGCAA	ATGTCAGCGGCCAGGCGGTTCCGCTGGTGTGCGCAGGAGGCGCGCTGG	660
661	QY	TGGCACCGGCA	TGAGCTGCGCGCGGCATCGACGCGCGACGT	705
661	DB	TGGCACCGGCA	TGAGCTGCGCGCGGCATCGACGCGCGACGT	705

```

RESULT 3
US-09-285-306-6
; Sequence 6, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
ITS-09-285-306-6

```

	Query Match	100.0%;	Score 705;	DB 9;	Length 705;
	Best Local Similarity	100.0%;	Pred. No. 2.1e-154;		
	Matches 705;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0
Qy	1	CCAGAGCTGGAGGCGATCACACCGACAGCCCTGATCAACATCCGTCCAGTCGTGGCGG	60		
Db	1	CCCAGGACGTGGAGGCGATCACACCGACAGCCCTGATCAACATCCGTCCAGTCGTGGCGG	60		
Qy	61	CGATCAAGAGTTCCTTCGGCACACAGCCAGCTGTCCAGTTTCATGGACCAAGACAACCCGC	120		
Db	61	CGATCAAGAGTTCCTTCGGCACACAGCCAGCTGTCCAGTTTCATGGACCAAGACAACCCGC	120		

Db	61	CGATCAAGGAGTCTCTTCGGCACCAGCCAGCTGTCCAGTTCTATGACACAGAACACCCCGC	120
Qy	121	TGTCGGGGCTCACCCAAAGCGCGGCTGTGGCGTGGGCCGGGTGTCTGTCTCCGGG	180
Db	121	TGTCGGGGCTCACCCAAAGCGCGGCTGTGGCGTGGGCCGGGTGTCTGTCTCCGGG	180
Qy	181	ACGGGCCGGGTGGAGGTCGCGAGCTGCACCCGCTCCACTACGCGCCGGATGTGCCGA	240
Db	181	ACGGGCCGGGTGGAGGTCGCGAGCTGCACCCGCTCCACTACGCGCCGGATGTGCCGA	240
Qy	241	TCGAGACCCCGAGGGTCCCAACATCGTCTGTATCGGCTCGTGTGCGGTATGCGCGGG	300
Db	241	TCGAGACCCCGAGGGTCCCAACATCGTCTGTATCGGCTCGTGTGCGGTATGCGCGGG	300
Qy	301	TCAACCGGTTGGGTTTCATCGAGACCGGTCACCGCAAGTGGTCTCACGCGGTGTCACCG	360
Db	301	TCAACCGGTTGGGTTTCATCGAGACCGGTCACCGCAAGTGGTCTCACGCGGTGTCACCG	360
Qy	361	ACGAGATCCACTACCTGACCGCGACGAGGAGGACCGCCACGTGGTGGCGAGGCCAACT	420
Db	361	ACGAGATCCACTACCTGACCGCGACGAGGAGGACCGCCACGTGGTGGCGAGGCCAACT	420
Qy	421	CGCCGATCGACGAAGAAGGGCCGGTTTCGCGAGGGCCCGGGTGCTGGTCCGCGCGAAGCGG	480
Db	421	CGCCGATCGACGAAGAAGGGCCGGTTTCGCGAGGGCCCGGGTGCTGGTCCGCGCGAAGCGG	480
Qy	481	CGGAGGTCGAGTACGTGCCCTCGTCGAGGTGGACTACATGGACGTGTGCGCCGCGCAGA	540
Db	481	CGGAGGTCGAGTACGTGCCCTCGTCGAGGTGGACTACATGGACGTGTGCGCCGCGCAGA	540
Qy	541	TGGTGTGGTGGGCCACCGCGATGATCCGTTCTCTCGAGCACGACGACGCCAAACCGTGCCC	600
Db	541	TGGTGTGGTGGGCCACCGCGATGATCCGTTCTCTCGAGCACGACGACGCCAAACCGTGCCC	600
Qy	601	TGATGGCGGCCAACATCAGCGGCCAGCGGTTCCGCTGGTGGCAGCGAGGCGCGGTGG	660
Db	601	TGATGGCGGCCAACATCAGCGGCCAGCGGTTCCGCTGGTGGCAGCGAGGCGCGGTGG	660
Qy	661	TGGGCACCGGCATGGAGCTGCGCGGCGCATGCACGCGCGAGCT	705
Db	661	TGGGCACCGGCATGGAGCTGCGCGGCGCATGCACGCGCGAGCT	705

Db

661 TGGGCAACGGCATGGAGCTGGCGCGGGCGATCGACGCGGGCGACGT 705

```

; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-8

Query Match      100.0%;   Score 705;   DB 9;   Length 705;
Best Local Similarity 100.0%;   Pred. No. 2.1e-154;
Matches 705;   Conservative 0;   Mismatches 0;   Indels

Qy      1   CCCAGGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCACG
db      1   CCCAGGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCACG

```

1 CCCAGGACGTGGAGGCGATCACCCGAGACCCCTGATCAACATCCGTCAGTCCGTGGCGG 60
 61 CGATCAGAGGAGTTCTTCGGACACAGCCAGCGTGTCCAGATTTCATGAGACGAGAACAAACCCGC 120
 61 CGATCAGAGGAGTTCTTCGGACACAGCCAGCGTGTCCAGATTTCATGAGACGAGAACAAACCCGC 120
 121 TGTCCGGGCTCACCCACAAGCCCGCTGTCCGGCTGTGGGCCCCGGTGTCTGTCCCGGG 180
 121 TGTCCGGGCTCACCCACAAGCCCGCTGTCCGGCTGTGGGCCCCGGTGTCTGTCCCGGG 180
 181 AGCGGCGCGGCTGAGGTCCGACAGCTGCACCCGTCCTACCTACGCGCGGATGTGCCCGA 240
 181 AGCGGCGCGGCTGAGGTCCGACAGCTGCACCCGTCCTACCTACGCGCGGATGTGCCCGA 240
 241 TCGAGACCCCGGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTCTGCTGATGCGCGG 300
 241 TCGAGACCCCGGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTCTGCTGATGCGCGG 300
 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTCGACGCGGTGTCACCG 360
 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTCGACGCGGTGTCACCG 360
 361 ACAGATCACTACCTGACCGCGGAGGAGGACCGCCACCTGCTGGCGCAGGCGCAACT 420
 361 ACAGATCACTACCTGACCGCGGAGGAGGACCGCCACCTGCTGGCGCAGGCGCAACT 420
 421 CCGCGATCGACACAAAGGCGCGGTTCCGCGAGGCGCGGTTCCGCGAGGCGCGGTCGCG 480
 421 CCGCGATCGACACAAAGGCGCGGTTCCGCGAGGCGCGGTTCCGCGAGGCGCGGTCGCG 480
 481 GCGAGTCCAGTACGTGCCCTCGTCGAGGTGAGTACATGACGCTGTCCGCGCGCAGA 540
 481 GCGAGTCCAGTACGTGCCCTCGTCGAGGTGAGTACATGACGCTGTCCGCGCGCAGA 540
 541 TGTGTCCGTGGCCACCGGATGATCCGTTCTTCGAGACACGACGACGCAACCGTGGCC 600
 541 TGTGTCCGTGGCCACCGGATGATCCGTTCTTCGAGACACGACGACGCAACCGTGGCC 600
 601 TGATGGCGGCAACATGACGCGCGGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660
 601 TGATGGCGGCAACATGACGCGCGGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660
 661 TGGCACCCGCGATGGAGCTGCGCGCGGCGATCGACGCGGCGAGCT 705
 661 TGGCACCCGCGATGGAGCTGCGCGCGGCGATCGACGCGGCGAGCT 705

RESULT 7
 US-09-285-306-12
 ; Sequence 12, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingers, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 12
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-12

Query Match 100.0%; Score 705; DB 9; Length 705;
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

61 CGATCAGAGGAGTTCTTCGGACACAGCCAGCGTGTCCAGATTTCATGAGACGAGAACAAACCCGC 120
 61 CGATCAGAGGAGTTCTTCGGACACAGCCAGCGTGTCCAGATTTCATGAGACGAGAACAAACCCGC 120
 121 TGTCCGGGCTCACCCACAAGCCCGCTGTCCGGCTGTGGGCCCCGGTGTCTGTCCCGGG 180
 121 TGTCCGGGCTCACCCACAAGCCCGCTGTCCGGCTGTGGGCCCCGGTGTCTGTCCCGGG 180
 181 AGCGGCGCGGCTGAGGTCCGACAGCTGCACCCGTCCTACCTACGCGCGGATGTGCCCGA 240
 181 AGCGGCGCGGCTGAGGTCCGACAGCTGCACCCGTCCTACCTACGCGCGGATGTGCCCGA 240
 241 TCGAGACCCCGGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTCTGCTGATGCGCGG 300
 241 TCGAGACCCCGGAGGTCCTCAACATCGGTCTGATCGGCTCGCTGTCTGCTGATGCGCGG 300
 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTCGACGCGGTGTCACCG 360
 301 TCAACCCGTTCCGGTTTCATCGAGACCGCGTACCGCAAGGTCGACGCGGTGTCACCG 360
 361 ACAGATCACTACCTGACCGCGGAGGAGGACCGCCACCTGCTGGCGCAGGCGCAACT 420
 361 ACAGATCACTACCTGACCGCGGAGGAGGACCGCCACCTGCTGGCGCAGGCGCAACT 420
 421 CCGCGATCGACACAAAGGCGCGGTTCCGCGAGGCGCGGTTCCGCGAGGCGCGGTCGCG 480
 421 CCGCGATCGACACAAAGGCGCGGTTCCGCGAGGCGCGGTTCCGCGAGGCGCGGTCGCG 480
 481 GCGAGTCCAGTACGTGCCCTCGTCGAGGTGAGTACATGACGCTGTCCGCGCGCAGA 540
 481 GCGAGTCCAGTACGTGCCCTCGTCGAGGTGAGTACATGACGCTGTCCGCGCGCAGA 540
 541 TGTGTCCGTGGCCACCGGATGATCCGTTCTTCGAGACACGACGACGCAACCGTGGCC 600
 541 TGTGTCCGTGGCCACCGGATGATCCGTTCTTCGAGACACGACGACGCAACCGTGGCC 600
 601 TGATGGCGGCAACATGACGCGCGGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660
 601 TGATGGCGGCAACATGACGCGCGGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660
 661 TGGCACCCGCGATGGAGCTGCGCGCGGCGATCGACGCGGCGAGCT 705
 661 TGGCACCCGCGATGGAGCTGCGCGCGGCGATCGACGCGGCGAGCT 705

RESULT 6
 US-09-285-306-9
 ; Sequence 9, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingers, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 9
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-9

Query Match 100.0%; Score 705; DB 9; Length 705;
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 CCCAGGACGTGGAGGCGATCACCCGAGACCCCTGATCAACATCCGTCAGTCCGTGGCGG 60

Qy	1	CCAGGACGTGGAGGGCATCACACCGCAGACCCCTGATCAACATCCCGTCCAGTCTGTGGCGG	60
Db	1	CCAGGACGTGGAGGGCATCACACCGCAGACCCCTGATCAACATCCCGTCCAGTCTGTGGCGG	60
Qy	61	CGATCAAGGAGTTCTTCGGCAACAGCCAGCTGTCCAGTTTCATGGACCAAGAAACACCCCG	120
Db	61	CGATCAAGGAGTTCTTCGGCAACAGCCAGCTGTCCAGTTTCATGGACCAAGAAACACCCCG	120
Qy	121	TGTCGGGGCTCACCCAAAGCGCCGCTCTCGGCGCTGGGCGCGGGTGTGTCTGTCCCGGG	180
Db	121	TGTCGGGGCTCACCCAAAGCGCGCTCTCGGCGCTGGGCGCGGGTGTGTCTGTCCCGGG	180
Qy	181	AGGGGCGCGGGCTGGAGGTCCGCGACGTGCACCCGTCACACTACGGCGGAGTGTGCCGA	240
Db	181	AGGGGCGCGGGCTGGAGGTCCGCGACGTGCACCCGTCACACTACGGCGGAGTGTGCCGA	240
Qy	241	TCGAGACCCCGAGGGTCCAAATCGGTCGTGATCGGTCGTGTGGTGTATGCGCGG	300
Db	241	TCGAGACCCCGAGGGTCCAAATCGGTCGTGATCGGTCGTGTGGTGTATGCGCGG	300
Qy	301	TCAACCCGTTCCGGTTTCATCGAGAGCGCTACCGCAAGTGGTTCGACGGCGTGTTCACCG	360
Db	301	TCAACCCGTTCCGGTTTCATCGAGAGCGCTACCGCAAGTGGTTCGACGGCGTGTTCACCG	360
Qy	361	ACGAGATCCACTACTGTCACCGCCAGCAGGAGGACCGCCACGTGGTGGCGCAGGCGCAACT	420
Db	361	ACGAGATCCACTACTGTCACCGCCAGCAGGAGGACCGCCACGTGGTGGCGCAGGCGCAACT	420
Qy	421	CGCGATCGACACAAGGGCCGGTTCCGGAGGCCCCGGGTCTGTCTCGCCGCAAGCGG	480
Db	421	CGCGATCGACACAAGGGCCGGTTCCGGAGGCCCCGGGTCTGTCTCGCCGCAAGCGG	480
Qy	481	GCGAGGTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGACGTGTGCGCGCGCCAGA	540
Db	481	GCGAGGTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGGACGTGTGCGCGCGCCAGA	540
Qy	541	TGTTGTTCGGTGGCCACCGCATGATCCGTTTCCTTCGAGACGACGACGCCAACCGTGTGCC	600
Db	541	TGTTGTTCGGTGGCCACCGCATGATCCGTTTCCTTCGAGACGACGACGCCAACCGTGTGCC	600
Qy	601	TGATGGGCGCCAACTGACGGCCAGCGGTTCCGTTGGTTCGCGACGAGGCGCCGCTGG	660
Db	601	TGATGGGCGCCAACTGACGGCCAGCGGTTCCGTTGGTTCGCGACGAGGCGCCGCTGG	660
Qy	661	TGGGCACCGGCATGGAGCTCGCGCGCGCATCGACCGCGCAGT	705
Db	661	TGGGCACCGGCATGGAGCTCGCGCGCGCATCGACCGCGCAGT	705

```

RESULT 8
US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 13
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-13

```

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2.1e-154; Matches 705; Conservative 0; Mismatches 0; Indels	
QY	1 CCCAGGACGTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTC
Db	1 CCCAGGACGTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTC
QY	61 CGATCAAGGAGTCTTTCGSCACACGACGCTGCCAGTTCATGGACCG
Db	61 CGATCAAGGAGTCTTTCGGCACGACGCTGCCAGTTCATGGACCG
QY	121 TGTGGGCTCACCCACAAGCGCCCTCTCGCGCTGGSCCCCGGGTG
Db	121 TGTGGGCTCACCCACAAGCGCCCTCTCGCGCTGGGCCCCGGGTG
QY	181 AGCGGGCGGGCTGGAGTTCGCGACGTGCACCCCTCCCACTACGGCC
Db	181 AGCGGGCGGGCTGGAGTTCGCGACGTGCACCCCTCCCACTACGGCC
QY	241 TCGAGACCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTCGG
Db	241 TCGAGACCCCGGAGGTTCCCAACATCGGTCTGATCGGCTCGCTCGG
QY	301 TCAACCCGTTTCGGGTTTCATCGAGACGCGTACCGAAGGTGTCAGCG
Db	301 TCAACCCGTTTCGGGTTTCATCGAGACGCGTACCGAAGGTGTCAGCG
QY	361 ACGAGATCCACTACTTCGACCGCCGACGAGGAGGACCGACGTGTGG
Db	361 ACGAGATCCACTACTTCGACCGCCGACGAGGAGGACCGACGTGTGG
QY	421 CGCCGATCGACGCAAGGGCCGTTTCGCGAGGCCGGGTGCTGTCCG
Db	421 CGCCGATCGACCAAGGGCCGTTTCGCGAGGCCGGGTGCTGTCCG
QY	481 GCGAGTTCAGTACGTGCCCTTCGTCCGAGTGGACTCATGSAAGTGT
Db	481 GCGAGTTCAGTACGTGCCCTTCGTCCGAGTGGACTCATGSAAGTGT
QY	541 TGGTTCGGTGCCACCGCGATGATCCCGTTCTCTCGAGCGACGACCG
Db	541 TGGTTCGGTGCCACCGCGATGATCCCGTTCTCTCGAGCGACGACCG
QY	601 TGATGGGCGCAACATGACGCCAGCGCGTTCCGTTGTTGCGCAGCGA
Db	601 TGATGGGCGCAACATGACGCCAGCGCGTTCCGTTGTTGCGCAGCGA
QY	661 TGGGCACCGCATGAGCTGCGCGCGCGCATCGACGCGCGACGT 705
Db	661 TGGGCACCGCATGAGCTGCGCGCGCGCATCGACGCGCGACGT 705

```

RESULT 9
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14

```

ORGANISM: Mycobacterium avium
US-09-285-306-16

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2,1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGCGGATCACCGCAGACCTGATCAATCGCTCAGTCGTGGCGG 60
DB 1 CCCAGGAGCTGGAGCGGATCACCGCAGACCTGATCAATCGCTCAGTCGTGGCGG 60

QY 61 CGATCAAGAGGTTCTTCGGCACCAGCAGCTGTCCTCCAGTTCATGACAGAACACCCGC 120
DB 61 CGATCAAGAGGTTCTTCGGCACCAGCAGCTGTCCTCCAGTTCATGACAGAACACCCGC 120

QY 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGGCGCTGGGCCCGGTGTCTGTCCCGG 180
DB 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGGCGCTGGGCCCGGTGTCTGTCCCGG 180

QY 181 AGCGGCGCGGCTGGAGGTCGCGACGTGCAACCGTCCCACTACGCGCGGATGTCGCCA 240
DB 181 AGCGGCGCGGCTGGAGGTCGCGACGTGCAACCGTCCCACTACGCGCGGATGTCGCCA 240

QY 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGCGG 300
DB 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGCGG 300

QY 301 TCACCCCGTTCCGGGTTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGCGTCAAC 360
DB 301 TCACCCCGTTCCGGGTTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGCGTCAAC 360

QY 361 ACCAGATCCACTACCTGACCGCGCAGAGGAGACCGCCACGTCGTGGCGCAGGCCAAT 420
DB 361 ACCAGATCCACTACCTGACCGCGCAGAGGAGACCGCCACGTCGTGGCGCAGGCCAAT 420

QY 421 CGCGGATCGACGACAGGGCGGGTTCGCGAGCGCGGGTCTGGTCCGCGCAAGCGG 480
DB 421 CGCGGATCGACGACAGGGCGGGTTCGCGAGCGCGGGTCTGGTCCGCGCAAGCGG 480

QY 481 GCGAGGTCGAGTACGTCGCCCTCGTCCGAGGTGGACTACATGGACGTCGCGCGCCAGA 540
DB 481 GCGAGGTCGAGTACGTCGCCCTCGTCCGAGGTGGACTACATGGACGTCGCGCGCCAGA 540

QY 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGACCGTGGCC 600
DB 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGACCGTGGCC 600

QY 601 TGATGGGCGCCAAATGACGAGCGCCAGCGGTTCGCTGGTTCGCGAGGCGCGCTGG 660
DB 601 TGATGGGCGCCAAATGACGAGCGCCAGCGGTTCGCTGGTTCGCGAGGCGCGCTGG 660

QY 661 TGGGACCGCGCATGGAGCTGCGCGCGGATCGACGCGCGACGT 705
DB 661 TGGGACCGCGCATGGAGCTGCGCGCGGATCGACGCGCGACGT 705

RESULT 11
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2,1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGCGGATCACCGCAGACCTGATCAATCGCTCAGTCGTGGCGG 60
DB 1 CCCAGGAGCTGGAGCGGATCACCGCAGACCTGATCAATCGCTCAGTCGTGGCGG 60

QY 61 CGATCAAGAGGTTCTTCGGCACCAGCAGCTGTCCTCCAGTTCATGACAGAACACCCGC 120
DB 61 CGATCAAGAGGTTCTTCGGCACCAGCAGCTGTCCTCCAGTTCATGACAGAACACCCGC 120

QY 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGGCGCTGGGCCCGGTGTCTGTCCCGG 180
DB 121 TGTCCGGGCTCACCCACAAGCGCCGCTGTCCGGCGCTGGGCCCGGTGTCTGTCCCGG 180

QY 181 AGCGGCGCGGCTGGAGGTCGCGACGTGCAACCGTCCCACTACGCGCGGATGTCGCCA 240
DB 181 AGCGGCGCGGCTGGAGGTCGCGACGTGCAACCGTCCCACTACGCGCGGATGTCGCCA 240

QY 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGCGG 300
DB 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGATCGGCTCGCTCGGTGTATGCGCGG 300

QY 301 TCACCCCGTTCCGGGTTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGCGTCAAC 360
DB 301 TCACCCCGTTCCGGGTTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGGCGTCAAC 360

QY 361 ACCAGATCCACTACCTGACCGCGCAGAGGAGACCGCCACGTCGTGGCGCAGGCCAAT 420
DB 361 ACCAGATCCACTACCTGACCGCGCAGAGGAGACCGCCACGTCGTGGCGCAGGCCAAT 420

QY 421 CGCGGATCGACGACAGGGCGGGTTCGCGAGCGCGGGTCTGGTCCGCGCAAGCGG 480
DB 421 CGCGGATCGACGACAGGGCGGGTTCGCGAGCGCGGGTCTGGTCCGCGCAAGCGG 480

QY 481 GCGAGGTCGAGTACGTCGCCCTCGTCCGAGGTGGACTACATGGACGTCGCGCGCCAGA 540
DB 481 GCGAGGTCGAGTACGTCGCCCTCGTCCGAGGTGGACTACATGGACGTCGCGCGCCAGA 540

QY 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGACCGTGGCC 600
DB 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGACCGTGGCC 600

QY 601 TGATGGGCGCCAAATGACGAGCGCCAGCGGTTCGCTGGTTCGCGAGGCGCGCTGG 660
DB 601 TGATGGGCGCCAAATGACGAGCGCCAGCGGTTCGCTGGTTCGCGAGGCGCGCTGG 660

QY 661 TGGGACCGCGCATGGAGCTGCGCGCGGATCGACGCGCGACGT 705
DB 661 TGGGACCGCGCATGGAGCTGCGCGCGGATCGACGCGCGACGT 705

RESULT 10
US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA


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; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCCGTCGTCGGG 60
Db 1 CCAGGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCCGTCGTCGGG 60
QY 61 CGATCAAGAGTTCCTTCGGCACCAGCAGCTGTCCAGTTCATGACCAAGAAACAAACCCGC 120
Db 61 CGATCAAGAGTTCCTTCGGCACCAGCAGCTGTCCAGTTCATGACCAAGAAACAAACCCGC 120
QY 121 TGTTCGGGGCTCACCCACAAAGCGCGCTGTGCGCGCTGGCGCTGGCTGTCTGTCCCGGG 180
Db 121 TGTTCGGGGCTCACCCACAAAGCGCGCTGTGCGCGCTGGCGCTGGCTGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGGCTGGAGTTCGCGAGCTGCACCCGTCCTACCTACGCGCGGATGTGCCGA 240
Db 181 AGCGGCGCGGGCTGGAGTTCGCGAGCTGCACCCGTCCTACCTACGCGCGGATGTGCCGA 240
QY 241 TCGACACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGTCGCTGTATGCCGG 300
Db 241 TCGACACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGTCGCTGTATGCCGG 300
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCGTACCGAAGGTGTGTCGACGGCGTGTACCG 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCGTACCGAAGGTGTGTCGACGGCGTGTACCG 360
QY 361 ACAGATCCACTACTGACCCGCGAGGAGGACCGCACGTCGTGTGCGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCCGCGAGGAGGACCGCACGTCGTGTGCGCGAGGCCAACT 420
QY 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGCTGTGTCGCGCGAGGCCAACT 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGCTGTGTCGCGCGAGGCCAACT 480
QY 481 GCGAGTTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGAGCTGTGCGCGCGCAGA 540
Db 481 GCGAGTTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGAGCTGTGCGCGCGCAGA 540
QY 541 TGCTGTCGTGGCCACCGCGATGATCCGCTTCCTCGAGCAGCAGCGACCGTGTGCC 600
Db 541 TGCTGTCGTGGCCACCGCGATGATCCGCTTCCTCGAGCAGCAGCGACCGTGTGCC 600
QY 601 TGATGGCGGCAACATGACGCGCGAGCGGTTCCGCTGTGTCGCGAGCGCGCGCTGG 660
Db 601 TGATGGCGGCAACATGACGCGCGAGCGGTTCCGCTGTGTCGCGAGCGCGCGCTGG 660
QY 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGAGCT 705
Db 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGAGCT 705

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RESULT 12

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US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700S
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181

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RESULT 13

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US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700S
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616

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; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

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Query Match      99.8%; Score 703.4; DB 9; Length 705;
Best Local Similarity 99.9%; Pred. No. 4.9e-154;
Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCCGTCGTCGGG 60
Db 1 CCAGGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCAGTCCGTCGTCGGG 60
QY 61 CGATCAAGAGTTCCTTCGGCACCAGCAGCTGTCCAGTTCATGACCAAGAAACAAACCCGC 120
Db 61 CGATCAAGAGTTCCTTCGGCACCAGCAGCTGTCCAGTTCATGACCAAGAAACAAACCCGC 120
QY 121 TGTTCGGGGCTCACCCACAAAGCGCGCTGTGCGCGCTGGCGCTGGCTGTCTGTCCCGGG 180
Db 121 TGTTCGGGGCTCACCCACAAAGCGCGCTGTGCGCGCTGGCGCTGGCTGTCTGTCCCGGG 180
QY 181 AGCGGCGCGGGCTGGAGTTCGCGAGCTGCACCCGTCCTACCTACGCGCGGATGTGCCGA 240
Db 181 AGCGGCGCGGGCTGGAGTTCGCGAGCTGCACCCGTCCTACCTACGCGCGGATGTGCCGA 240
QY 241 TCGACACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGTCGCTGTATGCCGG 300
Db 241 TCGACACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGTCGCTGTATGCCGG 300
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCGTACCGAAGGTGTGTCGACGGCGTGTACCG 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACCGCGTACCGAAGGTGTGTCGACGGCGTGTACCG 360
QY 361 ACAGATCCACTACTGACCCGCGAGGAGGACCGCACGTCGTGTGCGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCCGCGAGGAGGACCGCACGTCGTGTGCGCGAGGCCAACT 420
QY 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGCTGTGTCGCGCGAGGCCAACT 480
Db 421 CGCCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGCTGTGTCGCGCGAGGCCAACT 480
QY 481 GCGAGTTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGAGCTGTGCGCGCGCAGA 540
Db 481 GCGAGTTCGAGTACGTGCCCTCGTCCGAGTGGACTACATGAGCTGTGCGCGCGCAGA 540
QY 541 TGCTGTCGTGGCCACCGCGATGATCCGCTTCCTCGAGCAGCAGCGACCGTGTGCC 600
Db 541 TGCTGTCGTGGCCACCGCGATGATCCGCTTCCTCGAGCAGCAGCGACCGTGTGCC 600
QY 601 TGATGGCGGCAACATGACGCGCGAGCGGTTCCGCTGTGTCGCGAGCGCGCGCTGG 660
Db 601 TGATGGCGGCAACATGACGCGCGAGCGGTTCCGCTGTGTCGCGAGCGCGCGCTGG 660
QY 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGAGCT 705
Db 661 TGGGCACCGGCATGGAGCTGCGCGCGCGATCGACGCGCGAGCT 705

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Fri Aug 20 12:39:18 2004

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; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gieras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
;
; US-09-285-306-11
Query Match      98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 1e-151;
Matches 697; Conservative 0; Mismatches 8; Indels 0; Gaps 0;
QY      1 CCCAGGACGTGAGGGGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG 60
Db      1 CCCAGGACGTGAGGGGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG 60
QY      61 CGATCAAGGAGTTCTTCGGCACCAGCAGCAGTCGTCCAGTTTCATGACCAAGAACCCCGC 120
Db      61 CGATCAAGGAGTTCTTCGGCACCAGCAGCAGTCGTCCAGTTTCATGACCAAGAACCCCGC 120
QY      121 TGTCCGGGCTCACCCACCAAGCGCGCTGTGCGGCTTGGGCGCGGGTGGTCTGCCCGG 180
Db      121 TGTCCGGGCTCACCCACCAAGCGCGCTGTGCGGCTTGGGCGCGGGTGGTCTGCCCGG 180
QY      181 AGCGGCGCGGCTGAGAGTCCGACATCGGTCTGTATCGGCTCGCTGTGCGGTGTATGCGCGG 240
Db      181 AGCGGCGCGGCTGAGAGTCCGACATCGGTCTGTATCGGCTCGCTGTGCGGTGTATGCGCGG 240
QY      241 TCAGAGACCGCGGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTGTGCGGTGTATGCGCGG 300
Db      241 TCAGAGACCGCGGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTGTGCGGTGTATGCGCGG 300
QY      301 TCAACCCGTTCCGGGTTTCATCGAGACCGCGTACCGGACGGTGTGACGGCGTGTACCG 360
Db      301 TGAACCCGTTCCGGGTTTCATCGAGACCGCGTACCGGACGGTGTGACGGCGTGTACCG 360
QY      361 ACAGATCCACTACTGACCGCGCAGGAGGACCGCACCTGCTGCTGCGGCGGAGGCGCAACT 420
Db      361 ACAGATCCACTACTGACCGCGCAGGAGGACCGCACCTGCTGCTGCGGCGGAGGCGCAACT 420
QY      421 CGCCGATCGAGCAAGGGCGGTTTCGGGAGGCGCGGGTGTGCTGCTGCGCGCAGAGCGG 480
Db      421 CGCCGATCGAGCAAGGGCGGTTTCGGGAGGCGCGGGTGTGCTGCTGCGCGCAGAGCGG 480
QY      481 GCGAGGTGAGTACGTCGCTCGTCGAGGTGAGTACATGACAGCTGTGCTGCGCGCAGAG 540
Db      481 GCGAGGTGAGTACGTCGCTCGTCGAGGTGAGTACATGACAGCTGTGCTGCGCGCAGAG 540
QY      541 TGTGTGCGTGGCCACCGGATGATCCCGTTCCTCGAGCACGACGACGACCGTGGCC 600
Db      541 TGTGTGCGTGGCCACCGGATGATCCCGTTCCTCGAGCACGACGACGACCGTGGCC 600
QY      601 TGATGGGCGCCCAACATGACGAGCGCAGGCGGTTCCGTGTGCGCAGGAGGCGCGCTGG 660

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; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
;
; US-09-285-306-3
Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 4.3e-152;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;
QY      1 CCCAGGACGTGAGGGGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG 60
Db      1 CCCAGGACGTGAGGGGATCACACCGCAGACCTGATCAACATCCGTCAGTCGTGGCGG 60
QY      61 CGATCAAGGAGTTCTTCGGCACCAGCAGCAGTCGTCCAGTTTCATGACCAAGAACCCCGC 120
Db      61 CGATCAAGGAGTTCTTCGGCACCAGCAGCAGTCGTCCAGTTTCATGACCAAGAACCCCGC 120
QY      121 TGTCCGGGCTCACCCACCAAGCGCGCTGTGCGGCTTGGGCGCGGGTGGTCTGCCCGG 180
Db      121 TGTCCGGGCTCACCCACCAAGCGCGCTGTGCGGCTTGGGCGCGGGTGGTCTGCCCGG 180
QY      181 AGCGGCGCGGCTGAGAGTCCGACATCGGTCTGTATCGGCTCGCTGTGCGGTGTATGCGCGG 240
Db      181 AGCGGCGCGGCTGAGAGTCCGACATCGGTCTGTATCGGCTCGCTGTGCGGTGTATGCGCGG 240
QY      241 TCAGAGACCGCGGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTGTGCGGTGTATGCGCGG 300
Db      241 TCAGAGACCGCGGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTGTGCGGTGTATGCGCGG 300
QY      301 TCAACCCGTTCCGGGTTTCATCGAGACCGCGTACCGAAGGTGTGACGGCGTGTACCG 360
Db      301 TCAACCCGTTCCGGGTTTCATCGAGACCGCGTACCGAAGGTGTGACGGCGTGTACCG 360
QY      361 ACAGATCCACTACTGACCGCGCAGGAGGACCGCACCTGCTGCTGCGGCGGAGGCGCAACT 420
Db      361 ACAGATCCACTACTGACCGCGCAGGAGGACCGCACCTGCTGCTGCGGCGGAGGCGCAACT 420
QY      421 CGCCGATCGAGCAAGGGCGGTTTCGGGAGGCGCGGGTGTGCTGCTGCGCGCAGAGCGG 480
Db      421 CGCCGATCGAGCAAGGGCGGTTTCGGGAGGCGCGGGTGTGCTGCTGCGCGCAGAGCGG 480
QY      481 GCGAGGTGAGTACGTCGCTCGTCGAGGTGAGTACATGACAGCTGTGCTGCGCGCAGAG 540
Db      481 GCGAGGTGAGTACGTCGCTCGTCGAGGTGAGTACATGACAGCTGTGCTGCGCGCAGAG 540
QY      541 TGTGTGCGTGGCCACCGGATGATCCCGTTCCTCGAGCACGACGACGACCGTGGCC 600
Db      541 TGTGTGCGTGGCCACCGGATGATCCCGTTCCTCGAGCACGACGACGACCGTGGCC 600
QY      601 TGATGGGCGCCCAACATGACGAGCGCAGGCGGTTCCGTGTGCGCAGGAGGCGCGCTGG 660
Db      601 TGATGGGCGCCCAACATGACGAGCGCAGGCGGTTCCGTGTGCGCAGGAGGCGCGCTGG 660
QY      661 TGGGCAACCGGATGAGAGTTCGCGCGCGGATCGACGCGCGAGCT 705
Db      661 TGGGCAACCGGATGAGAGTTCGCGCGCGGATCGACGCGCGAGCT 705

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Db 601 TGATGGGCGCAACATGACGGCCAGCGGTTCCGCTGGTGGCAGCGAGCGCGCGCTGG 660
QY 661 TGGGCAACGGCATGGAGCTCGCGCGCGCATGACAGCGGCGACGT 705
Db 661 TGGGCAACGGCATGGAGCTCGCGCGCGCATGACAGCGGCGACGT 705
RESULT 15
US-09-285-306-10
; Sequence 10, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-10

Query Match 98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 3.7e-151;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;
QY 1 CCCAGGACGTGGAGCGGATCACACGCGAGACCCCTGATCAACATCCGTCCAGTCTGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGGATCACACGCGAGACCCCTGATCAACATCCGTCCGTCTGTGGCGG 60
QY 61 CGATCAAGGAGTCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAAGCAACACCCGC 120
Db 61 CGATCAAGGAGTCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAAGCAACACCCGC 120
QY 121 TGTGGGGCTCACCCACAAAGCGCGCCCTGTGGCGCTGGCGCTGGCGCTGGCGCTGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAAGCGCGCCCTGTGGCGCTGGCGCTGGCGCTGGCGCTGGTCTGTCCCGGG 180
QY 181 AGCGGGCGGGCTGGAGTCCGCGACGTGCACCGTCCACTACGCGCGGATGTCCCGCA 240
Db 181 AGCGGGCGGGCTGGAGTCCGCGACGTGCACCGTCCACTACGCGCGGATGTCCCGCA 240
QY 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTGTGGTGTATCGCGGG 300
Db 241 TCGAGACCCCGGAGGGTCCCAACATCGGTCTGTATCGGCTCGCTGTGGTGTATCGCGGG 300
QY 301 TCACCCGTTCCGGGTTTCATCGAGACGGCGTTACCGCAAGGTGGTTCGACGGCGTGTCCACCG 360
Db 301 TSACCCGTTCCGGGTTTCATCGAGACCCCGTTACCGCAAGGTGGTTCGACGGTGTGTCCACCG 360
QY 361 ACAGATCCCACTACCTGACCGCGCGACGAGGAGCCGACGTCGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCCACTACCTGACCGCGCGACGAGGAGCCGACGTCGTGGTGGCGAGGCCAACT 420
QY 421 CGCGGATCGACGCAAGGGCGGTTTCGCGGAGGCCCGGGTGTCTGGTCCGCGCAAGGCGG 480
Db 421 CGCGGATCGACGCAAGGGCGGTTTCGAGGAGKCCCGGGTGTCTGGTCCGCGCAAGGCGG 480
QY 481 GCGAGTCCGAGTACGTGCCCTTCGTCAGGTGGACTACATGGACGTGTCCCGCGCCAGA 540
Db 481 GCGAGTCCGAGTACGTGCCCTTCGTCAGGTGGACTACATGGACGTGTCCCGCGCCAGA 540
QY 541 TGGTGTGGTGGCCACCGCGATGATCCGTTCTCGAGCACGACGCGCAACCGTGCCC 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCGTTCTCGAGCACGACGCGCAACCGTGCCC 600

QY 601 TGATGGGCGCAACATGACGGCCAGCGGTTCCGCTGGTGGCAGCGAGCGCGCGCTGG 660
Db 601 TGATGGGCGCAACATGACGGCCAGCGGTTCCGCTGGTGGCAGCGAGCGCGCGCTGG 660
QY 661 TGGGCAACGGCATGGAGCTCGCGCGCGCATGACAGCGGCGACGT 705
Db 661 TGGGCAACGGCATGGAGCTCGCGCGCGCATGACAGCGGCGACGT 705

Search completed: August 20, 2004, 01:36:39
Job time : 408.972 secs

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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 12:36:51 ; Search time 66.4446 Seconds
(without alignments)
5888.223 Million cell updates/sec

Title: US-09-285-306-7
Perfect score: 705
Sequence: 1 ccaggagctggagcgatc.....ggcgatcgagcgagcgt 705

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA.*

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2: /cgn2_6/ptodata/2/ina/5B_COMB.seq.*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seq.*
4: /cgn2_6/ptodata/2/ina/6B_COMB.seq.*
5: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq.*
6: /cgn2_6/ptodata/2/ina/backfiles1.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4111529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	3	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	4	US-08-520-946-135
11	530.4	75.2	620	4	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-09-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
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20	528.8	75.0	620	4	US-08-520-946-140
21	528.8	75.0	620	4	US-09-655-378A-136
22	528.8	75.0	620	4	US-09-655-378A-137
23	528.8	75.0	620	4	US-09-655-378A-139
24	528.8	75.0	620	4	US-09-655-378A-140
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	371.2	52.7	4074	4	US-09-252-991A-4737

ALIGNMENTS

RESULT 1

US-08-797-812-24
; Sequence 24, Application US/08797812
; Patent No. 6228575

; GENERAL INFORMATION:

; APPLICANT: Gigeras, Thomas A.

; APPLICANT: Mack, David

; APPLICANT: Chee, Mark S.

; APPLICANT: Berno, Anthony J.

; APPLICANT: Stryer, Lubert

; APPLICANT: Ghandour, Ghassan

; APPLICANT: Wang, Ching

; TITLE OF INVENTION: Chip-Based Species Identification and

; NUMBER OF SEQUENCES: 36

; CORRESPONDENCE ADDRESS:

; ADDRESS: Townsend and Townsend and Crew LLP

; CITY: San Francisco

; STATE: CA

; COUNTRY: USA

; ZIP: 94111

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent in Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/797,812

; FILING DATE: 07-FEB-1997

; CLASSIFICATION: 435

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 60/017,765

; FILING DATE: 15-MAY-1996

; PRIOR APPLICATION DATA:

; APPLICATION NUMBER: US 08/629,031

; FILING DATE: 08-APR-1996

; APPLICATION DATA:

; APPLICATION NUMBER: US 60/012,631

; FILING DATE: 01-MAR-1996

; APPLICATION DATA:

; APPLICATION NUMBER: US 60/011,339

; FILING DATE: 08-FEB-1996

; ATTORNEY/AGENT INFORMATION:

; NAME: Fitts, Renee A.

; REGISTRATION NUMBER: 35,136

; REFERENCE/DOCKET NUMBER: 16528X-018550

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 415-326-2400

; TELEFAX: 415-326-2422

Sequence 4771, Ap
Sequence 22, Appl
Sequence 30, Appl
Sequence 59, Appl
Sequence 59, Appl
Sequence 36, Appl
Sequence 36, Appl
Sequence 1097, Ap
Sequence 3177, Ap
Sequence 20, Appl
Sequence 35, Appl
Sequence 35, Appl
Sequence 401, App
Sequence 111, App
Sequence 1, Appli
Sequence 1, Appli
Sequence 4006, Ap
Sequence 34, Appl

28 371.2 52.7 4092 4 US-09-252-991A-4771
29 337.2 47.8 4083 4 US-09-489-039A-22
30 337.2 47.8 4206 4 US-09-489-039A-30
31 293.4 41.6 432 2 US-08-313-185-59
32 293.4 41.6 432 3 US-09-082-614A-59
33 286.2 40.6 324 4 US-08-750-088A-36
34 286.2 40.6 324 4 US-09-722-319-36
35 265.2 37.6 2964 4 US-09-540-236-1097
36 265.2 37.6 4167 4 US-09-543-681A-3177
37 265.2 37.6 31063 4 US-09-596-002-20
38 255.6 36.3 319 4 US-08-750-088A-35
39 255.6 36.3 319 4 US-09-722-319-35
40 249.8 35.4 11935 4 US-09-634-238-401
41 244.4 34.7 14672 4 US-08-961-527-111
42 244.4 34.7 1830121 4 US-09-557-884-1
43 244.4 34.7 1830121 4 US-09-643-990A-1
44 241.2 34.2 4143 4 US-09-328-352-4006
45 226.4 32.1 329 4 US-08-750-088A-34

Fri Aug 20 12:39:19 2004

FILE REFERENCE: 24366-20007.00

CURRENT APPLICATION NUMBER: US/09/103,840A

CURRENT FILING DATE: 1998-06-24

NUMBER OF SEQ ID NOS: 2

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 2

LENGTH: 4403765

TYPE: DNA

ORGANISM: Mycobacterium tuberculosis

FEATURE:

OTHER INFORMATION: CDC 1551

OTHER INFORMATION: "n" bases at various positions throughout the sequence

OTHER INFORMATION: represent a, t, c or g

US-09-103-840A-2

Query Match 85.5%; Score 603; DB 3; Length 4403765;

Best Local Similarity 91.4%; Pred. No. 3.9e-110; Indels 0; Gaps 0;

Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

1 CCAGGACGTGAGGCGATCACACGACAGCCCTGATCAACATCCCTCAGTCTGCGCG 60

DB 762963 CCAGGACGTGAGGCGATCACACGACAGCCCTGATCAACATCCCTCAGTCTGCGCG 763022

61 CGATCAAGAGTTCTTCGGCACCGACAGTGTCCAGTCTCCAGTCTATGACGACGAGAACCCGC 120

DB 763023 CGATCAAGAGTTCTTCGGCACCGACAGTGTCCAGTCTCCAGTCTATGACGACGAGAACCCGC 763082

121 TGTGCGGCTCACCAACAGCGCGCTGTGCGCGCTGCGCGCTGCGCGCTGCGCGCTGCGCG 180

DB 763083 TGTGCGGCTGACCCCAAGCGCGCTGTGCGCGCTGCGCGCTGCGCGCTGCGCGCTGCGCG 763142

181 AGCGGCGCGGCTGAGGTCGCGAGTGCACCCGTCCTCCACTACGCGCGGATGTCACCG 240

DB 763143 AGCGTCCGCGCTGAGGTCGCGAGTGCACCCGTCCTCCACTACGCGCGGATGTCACCG 763202

241 TCAGACCCCGAGGTCCTCCAACTCGTCTGATCGGCTCGCTGCTCGGTCGCTGATCGCGGG 300

DB 763203 TCAGAACCCCTGAGGCGCCCAACTCGTCTGATCGGCTCGCTGCTCGGTCGCTGATCGCGGG 763262

301 TCAGACCCCTGAGGCGCCCAACTCGTCTGATCGGCTCGCTGCTCGGTCGCTGATCGCGGG 360

DB 763263 TCAGAACCCCTGAGGCGCCCAACTCGTCTGATCGGCTCGCTGCTCGGTCGCTGATCGCGGG 763322

361 ACAGATTCCTACTCTGACCGCGACGAGGAGACCCGACGTCGTCGTCGTCGTCGTCGTCGTC 420

DB 763323 ACAGATTCCTACTCTGACCGCGACGAGGAGACCCGACGTCGTCGTCGTCGTCGTCGTCG 763382

421 CGCGATTCGACGACGAGGCGCGTTCGCGGAGCGCGGTCGTCGTCGTCGTCGTCGTCGTCGTC 480

DB 763383 CGCGATTCGACGACGAGGCGCGTTCGCGGAGCGCGGTCGTCGTCGTCGTCGTCGTCGTCGTCG 763442

481 CGGAGTTCGATAGTCTGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCG 540

DB 763443 CGGAGTTCGATAGTCTGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCG 763502

541 TGGTGTGCGTGGCCACCGCGATGATCCGTCCTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 600

DB 763503 TGGTGTGCGTGGCCACCGCGATGATCCGTCCTTCTTCTGAGACGACGACGACGACGACGAC 763562

601 TGATGGGCGCCAACTGACGCGCGCGGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660

DB 763563 TCATGGGCGCCAACTGACGCGCGCGGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 763622

661 TGGGCACCGCATGGAGTTCGCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTC 699

DB 763623 TGGGCACCGCATGGAGTTCGCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTC 763661

RESULT 3

US-09-103-840A-1

; Sequence 1, Application US/09103840A

; Patent No. 6294328

; GENERAL INFORMATION:

INFORMATION FOR SEQ ID NO: 24:

SEQUENCE CHARACTERISTICS:

LENGTH: 706 base pairs

TYPE: nucleic acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: cDNA

US-08-797-812-24

Query Match 86.6%; Score 610.6; DB 3; Length 706;

Best Local Similarity 91.6%; Pred. No. 8.1e-112; Indels 0; Gaps 0;

Matches 646; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

1 CCAGGACGTGAGGCGATCACACGACAGCCCTGATCAACATCCCTCAGTCTGCGCG 60

DB 2 CCAGGACGTGAGGCGATCACACGACAGCCCTGATCAACATCCCTCAGTCTGCGCG 61

61 CGATCAAGAGTTCTTCGGCACCGACAGTGTCCAGTCTCCAGTCTATGACGACGAGAACCCGC 120

DB 62 CGATCAAGAGTTCTTCGGCACCGACAGTGTCCAGTCTCCAGTCTATGACGACGAGAACCCGC 121

121 TGTGCGGCTCACCAACAGCGCGCTGTGCGCGCTGCGCGCTGCGCGCTGCGCGCTGCGCG 180

DB 122 TGTGCGGCTGACCCCAAGCGCGCTGTGCGCGCTGCGCGCTGCGCGCTGCGCGCTGCGCG 181

181 AGCGGCGCGGCTGAGGTCGCGAGTGCACCCGTCCTCCACTACGCGCGGATGTCACCG 240

DB 182 AGCGTCCGCGCTGAGGTCGCGAGTGCACCCGTCCTCCACTACGCGCGGATGTCACCG 241

241 TCAGACCCCGAGGTCCTCCAACTCGTCTGATCGGCTCGCTGCTCGGTCGCTGATCGCGGG 300

DB 242 TCAGAACCCCTGAGGCGCCCAACTCGTCTGATCGGCTCGCTGCTCGGTCGCTGATCGCGGG 301

301 TCAGACCCCTGAGGCGCCCAACTCGTCTGATCGGCTCGCTGCTCGGTCGCTGATCGCGGG 360

DB 302 TCAGAACCCCTGAGGCGCCCAACTCGTCTGATCGGCTCGCTGCTCGGTCGCTGATCGCGGG 361

361 ACAGATTCCTACTCTGACCGCGACGAGGAGACCCGACGTCGTCGTCGTCGTCGTCGTCGTC 420

DB 362 ACAGATTCCTACTCTGACCGCGACGAGGAGACCCGACGTCGTCGTCGTCGTCGTCGTCGTC 421

421 CGCGATTCGACGACGAGGCGCGTTCGCGGAGCGCGGTCGTCGTCGTCGTCGTCGTCGTCGTC 480

DB 422 CGCGATTCGACGACGAGGCGCGTTCGCGGAGCGCGGTCGTCGTCGTCGTCGTCGTCGTCGTC 481

481 CGGAGTTCGATAGTCTGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCG 540

DB 482 CGGAGTTCGATAGTCTGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCGCTCG 541

541 TGGTGTGCGTGGCCACCGCGATGATCCGTCCTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 600

DB 542 TGGTGTGCGTGGCCACCGCGATGATCCGTCCTTCTTCTGAGACGACGACGACGACGACGAC 601

601 TGATGGGCGCCAACTGACGCGCGCGGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660

DB 602 TCATGGGCGCCAACTGACGCGCGCGGTCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 661

661 TGGGCACCGCATGGAGTTCGCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTC 705

DB 662 TGGGCACCGCATGGAGTTCGCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTCGCGCGGTC 706

RESULT 2

US-09-103-840A-2

; Sequence 2, Application US/09103840A

; Patent No. 6294328

; GENERAL INFORMATION:

; APPLICANT: FLEISCHMAN, Robert D.

; APPLICANT: WHITE, Owen R.

; APPLICANT: PRASER, Claire M.

; APPLICANT: VENTER, John C.

; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM

; TITLE OF INVENTION: TUBERCULOSIS

```
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.4%; Pred. No. 3.9e-110;
Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

Qy 1 CCCAGGAGCTGGAGCGCATCAACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 761003 CCCAGGAGCTGGAGCGCATCAACCGCAGACCGTTCATCAATCCGCGCGTGTGCGG 761062

Qy 61 CGATCAAGGAGTTCTTGGGCAACGCGAGCTGTCCAGTTCATGACCAACAACCCGCG 120
Db 761063 CGATCAAGGAGTTCTTGGGCAACGCGAGCTGTCCAGTTCATGACCAACAACCCGCG 761122

Qy 121 TGTGGGCTCACCACAAAGCGCCGCTGTGGGCTGGGCGCGGTGTCTGTCGCGG 180
Db 761123 TGTGGGCTTACCCCAAGCGCGGACTGTGGGCTGGGCGCGGTGTCTGTCGCGG 761182

Qy 181 AGCGGCGCGGCTGGAGTCCGCGACGTGACCCGCTCCACTACGCGCGGATGTCCCGA 240
Db 761183 AGCGTGGCGGCTGGAGTCCGCGACGTGACCCGCTCCACTACGCGCGGATGTCCCGA 761242

Qy 241 TCGAGACCCCGAGGCTCCAAATCGTCTGATCGGTGTGATCGGTGTGATGCGCGG 300
Db 761243 TCGAAACCCCTGAGGGGCCAAATCGTCTGATCGGTGTGATGCGGTGTGATGCGCGG 761302

Qy 301 TCAACCGCTTGGGTTCTATCGAGCGCGCTACCGCAAGGTGTGACGCGGTGTACGG 360
Db 761303 TCAACCGCTTGGGTTCTATCGAAACCGCTACCGCAAGGTGTGACGCGGTGTGAGCG 761362

Qy 361 ACGAGATCCACTACTGACCGCGCAGAGGAGCCGCACTGCTGTTGGCGAGGCAACT 420
Db 761363 ACGAGATCGTACTGACCGCGCAGAGGAGGACCGCACGCTGTGGCAAGGCCAATT 761422

Qy 421 CGCGATCGACGACAAAGGGCGGTTTCGCGAGGCGCGGCTGTGTTCCGCGCAAGGCGG 480
Db 761423 CGCGATCGATCGGACGCTGCTTCTGTCGAGCGCGGCTGTGTTCCGCGCAAGGCGG 761482

Qy 481 GCGAGTGGAGTACGTGCTTCTGTCGAGGTGGAATCATGACGCTGCGCGGCCGAGA 540
Db 761483 GCGAGTGGAGTACGTGCTTCTGTCGAGGTGGAATCATGACGCTGCGCGGCCGAGA 761542

Qy 541 TGGTGTGCTGGGCGCACCGCGATGATCCCGTTCTCGAGCAGACGACGCCAACCGTGCCC 600
Db 761543 TGGTGTGCTGGGCGCACCGCGATGATTCCTTCTGAGCAGACGACGCCAACCGTGCCC 761602

Qy 601 TGATGGGCGCCMAATGATGAGCGCCAGGCGGTTTCGCTGTGGTGGCAGAGGCGCGCTGG 660
Db 761603 TCATGGGCGCAACATGACGCGCCAGGCGGTTGCGCTGTGCTAGCAGGCGCGCGCTGG 761662

Qy 661 TGGGACCGGATGAGTGTGCGCGGCGATCGACGCGG 699
Db 761663 TGGGACCGGATGAGTGTGCGCGGCGATCGACGCGG 761701

RESULT 4
US-08-313-185-57
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; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/POCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-313-185-57

Query Match      79.2%; Score 558.2; DB 2; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.7e-101;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

Qy 1 CCCAGGAGCTGGAGCGATCAACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 1124 CCCAGGAGCTGGAGCGATCAACCGCAGACCGCTGATCAATATCCGTCGCGTGGCGG 1183

Qy 61 CGATCAAGGAGTTCTTGGGCAACGCGACCGAGCTGTCCAGTTCATGACCAACACACCGC 120
Db 1184 CTATCAAGGAATTCCTTGGGCAACGCGACCGAGCTGTCCAGTTCATGATCAGAACACCCCTC 1243

Qy 121 TGTGGGCTCACCACAAAGCGCGCCCTGTGCGGCTGGGCGCGGTGTCTGTCCCGGG 180
Db 1244 TGTGGGCTGACCCACAAAGCGCGCGCTGTGCGGCTGGGCGCGGTGTGTGCGGTG 1303

Qy 181 AGCGGCGCGGCTGGAGTCCGCGACGTGCAACCGCTCCACTAGCGCGGATGTGCCGGA 240
Db 1304 AGCGTCCGCGGTAGAGTCCGTCGAGTGCACCCCTTCGACTACGCGCGGATGTCCCGA 1363

Qy 241 TCGAGACCCCGAGGCTCCAAATCGCTGTGATCGGCTCGCTGTGCGGTGTATGCGCGG 300
Db 1364 TCGAGACTCCGAGGCGCGGCGAATAGGTGTGATCGGTTCATTGTCGCTGTACGCGCGG 1423

Qy 301 TCAACCGCTTGGGTTCTATCGAGACGCGGTACCGCAAGGTGTGACGCGGTGTGTCACCG 360
Db 1424 TCAACCGCTTGGGTTCTATCGAAACACCGTACCGCAAGGTGTGACGCGGTGTGTCACCG 1483
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Qy	361	ACGAGATCCACTACTCTACCGCCGACGAGAGAGACCGCCACGTGGTGGCGCAGGCCAACT	420
Db	1484	ACGAGATCGGAATACTTTGACCGCTGACGAGAGAAACCGCCATGTCTGTGGCGCAGGCCAACT	1543
Qy	421	CGCCGATCGACGACCAAGGGCGCGGTTCGCGAGAGGCCCGGGTGCTGGTCCGCGCGCAAGCGGG	480
Db	1544	CGCCGATCGACGAGGCCGCGCTTCCTCGAGCGCGCGGTGGTGGTGGCGCGCAAGCGGG	1603
Qy	481	GCAGGTCGAGTAGGTGTCCTCGTCCGAGGTGGACTACATGAGACGTGTCCGCGCGCCAGA	540
Db	1604	GCAGGTGGAGTAGTGTGGCTCGTCCGAGGTGGATTACATGGATGTCTCCACACGCCAGA	1663
Qy	541	TGTTGTCTGGTGGCCACCGCATGATCCGCTTCCTCGAGACGACGACGCGCAACCGTGCCCC	600
Db	1664	TGTTGTCTGGTGGCCACAGCGATGATTCCGTTCTTTGAGCACGACGACGCGCAACCGTGCCCC	1723
Qy	601	TGATGGCGCCACATGTCAGCGCCACGCGTTCGCTGTGGCCAGCGAGGCGCCGCTGG	660
Db	1724	TGATGGCGCGTAACTACGACGCGCCAGCGGTTCGTTGGTGGCAGCGAAACGACCGTTGG	1783
Qy	661	TGGCACCGCGCATGGAGCTCGCGCGCGCATCGACGCGG	699
Db	1784	TGGGTACCGGTATGAGTTGCGCGCGCGCCATCGACGCTG	1822

RESULT 5

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US-09-082-614A-57
; Sequence 57, Application US/09082614A
; Patent No. 6124098
; GENERAL INFORMATION:
;
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis

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RESULT 6

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US-08-250-030-1
; Sequence 1, Application US/08250030
; Patent No. 5643723
; GENERAL INFORMATION:
; APPLICANT: Persing, David H.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in
; TITLE OF INVENTION: Clinical Specimens
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA

```


ZIP: 55402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/250,030
FILING DATE: 26-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Muecing, Ann M.
REGISTRATION NUMBER: 33,977
REFERENCE/DOCKET NUMBER: 150.105US1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-339-0331
TELEFAX: 612-339-3061
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 970 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
US-08-250-030-1

Query Match 76.7%; Score 540.4; DB 1; Length 970;
Best Local Similarity 91.1%; Pred. No. 5.1e-98;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;
QY 1 CCCAGACGTGAGGCGATCACACCCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 341 CCCAGACGTGAGGCGATCACACCCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 400
QY 61 CGATCAAGAGTTCTTCGCGACACGACGACGCTGCCAGTTTCATGACCAACACCCCG 120
Db 401 CGATCAAGAGTTCTTCGCGACACGACGACGCTGCCAGTTTCATGACCAACACCCCG 460
QY 121 TGTGGGGTTCACCCACAAAGCCCGCTGTGCGGCTGGGGCCCGGCTGTGTCCCGGG 180
Db 461 TGTGGGGTTCACCCACAAAGCCCGCTGTGCGGCTGGGGCCCGGCTGTGTCCCGGG 520
QY 181 AGCGGGCGGGTTCACCCACAAAGCCCGCTGTGCGGCTGGGGCCCGGCTGTGTCCCGGG 240
Db 521 AGCGGGCGGGTTCACCCACAAAGCCCGCTGTGCGGCTGGGGCCCGGCTGTGTCCCGGG 580
QY 241 TCGAGATCCACTACCTGACCGCGGATCACCGGACGCTGATCAACATCCGTCCAGTCGTGGCGG 420
Db 641 TCGAGATCCACTACCTGACCGCGGATCACCGGACGCTGATCAACATCCGTCCAGTCGTGGCGG 700
QY 361 ACGAGATCCACTACCTGACCGCGGATCACCGGACGCTGATCAACATCCGTCCAGTCGTGGCGG 420
Db 701 ACGAGATCCACTACCTGACCGCGGATCACCGGACGCTGATCAACATCCGTCCAGTCGTGGCGG 760
QY 421 CGCGGATCGACGACGACGCGGCTTCGCGGAGGCGCGGCTGTGTCCCGCGGAGGCGG 480
Db 761 CGCGGATCGACGACGACGCGGCTTCGCGGAGGCGCGGCTGTGTCCCGCGGAGGCGG 820
QY 481 GCGAGGTGAGTACGTGCGCTTCGCGAGGTCGCTACATGACGCTGCGCGGCGGCGG 540
Db 821 GCGAGGTGAGTACGTGCGCTTCGCGAGGTCGCTACATGACGCTGCGCGGCGGCGG 880
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTTCCTCGAGCAGCAGCAGCCCAACGTCGCC 600
Db 881 TGGTGTGGTGGCCACCGCGATGATTCCTTCCTGGAGCAGCAGCAGCCCAACGTCGCC 660
QY 601 TGATGGGCGCCAAATGACGAGCGCAGGCGG 630
Db 941 TCATGGGCGCCAAATGACGAGCGCAGGCGG 970

RESULT 7
PCT-US95-06790-1
Sequence 1, Application PC/TUS9506790
GENERAL INFORMATION:
APPLICANT: Mayo Foundation for Medical Education and Research
APPLICANT: and Hoffmann-La Roche Inc.
TITLE OF INVENTION: Detection of a Genetic Locus Encoding
TITLE OF INVENTION: Resistance to Rifampin
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: Schwegman, Lundberg & Woessner
STREET: 3500 IDS Center
CITY: Minneapolis
STATE: MN
COUNTRY: USA
ZIP: 55402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/06790
FILING DATE: 26-MAY-1995
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Raasch, Kevin W.
REGISTRATION NUMBER: 35,651
REFERENCE/DOCKET NUMBER: 150.105WO1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-339-0331
TELEFAX: 612-339-3061
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 970 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
PCT-US95-06790-1

Query Match 76.7%; Score 540.4; DB 5; Length 970;
Best Local Similarity 91.1%; Pred. No. 5.1e-98;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;
QY 1 CCCAGACGTGAGGCGATCACACCCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 341 CCCAGACGTGAGGCGATCACACCCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 400
QY 61 CGATCAAGAGTTCTTCGCGACACGACGACGCTGCCAGTTTCATGACCAACACCCCG 120
Db 401 CGATCAAGAGTTCTTCGCGACACGACGACGCTGCCAGTTTCATGACCAACACCCCG 460
QY 121 TGTGGGGTTCACCCACAAAGCCCGCTGTGCGGCTGGGGCCCGGCTGTGTCCCGGG 180
Db 461 TGTGGGGTTCACCCACAAAGCCCGCTGTGCGGCTGGGGCCCGGCTGTGTCCCGGG 520
QY 181 AGCGGGCGGGTTCACCCACAAAGCCCGCTGTGCGGCTGGGGCCCGGCTGTGTCCCGGG 240
Db 521 AGCGGGCGGGTTCACCCACAAAGCCCGCTGTGCGGCTGGGGCCCGGCTGTGTCCCGGG 580
QY 241 TCGAGATCCACTACCTGACCGCGGATCACCGGACGCTGATCAACATCCGTCCAGTCGTGGCGG 420
Db 581 TCGAGATCCACTACCTGACCGCGGATCACCGGACGCTGATCAACATCCGTCCAGTCGTGGCGG 640
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGCTACCGCAAGGTGCTGACGCGCTGTACCG 360
Db 641 TCAACCCGTTTCGGGTTTCATCGAGACGCGCTACCGCAAGGTGCTGACGCGCTGTACCG 700
QY 361 ACGAGATCCACTACCTGACCGCGGATCACCGGACGCTGATCAACATCCGTCCAGTCGTGGCGG 420

Db 701 ACAGATCGTGTACCTGACCGCGGACGAGGAGACCGCCACGCTGTGGCACAGCCCAATT 760
QY 421 CGCCGATCGACGACAAAGGCGCGGTTCCGCGAGGCGCGGGTGTGGTCCGCGCGCAAGCGCG 480
Db 761 CGCCGATCGATGCGGACGCTGCTTCTGTCGAGCGCGGCTGTGGTCCGCGCGCAAGCGCG 820
QY 481 GCAGGTGAGTACGTCGCTCCCTGTCGAGGTGAGTACATGAGAGTGTGCGCGCGCGAGA 540
Db 821 GCAGGTGAGTACGTCGCTCCCTGTCGAGGTGAGTACATGAGAGTGTGCGCGCGCGAGA 880
QY 541 TGCTGTGCGTGGCCACCGCATGATCCGTTCTCGAGACGACGACGCGCAACCGTGCC 600
Db 881 TGCTGTGCGTGGCCACCGCATGATCCGTTCTCGAGAGTGTGCGCGCGCGAGA 940
QY 601 TGATGGCGCGCAACATGACGCGCGCGG 630
Db 941 TCATGGGCGCAACATGACGCGCGCGG 970

RESULT 8
US-08-757-653-135
; Sequence 135, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-135

Query Match 75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 91.0%; Pred. No. 4.6e-96;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAATCCGTCAGTGTGGCGGATCAAGAGTCTTCGCGACCAAGCAGCTGTCC 95
Db 1 ATCAATCCGTCAGTGTGGCGGATCAAGAGTCTTCGCGACCAAGCAGCTGTCC 60
QY 96 CAGTTTCATGACCAAGCAACCGCTGTGGGGCTCACCAAGCGCGCTGTGGCGG 155
Db 61 CAATTTCATGACCAAGCAACCGCTGTGGGGCTTACCAAGCGCGCTGTGGCGG 120

QY 156 CTGGGCGCGGCTGTCTGTCCCGGAGCGCGGCTGGAGTCCGCGACGTGACCCG 215
Db 121 CTGGGCGCGGCTGTCTGTACGTGAGCGTCCGCGGCTGGAGTCCGCGACGTGACCCG 180
QY 216 TCCACTACGCGCGGATGTGCCGATCGAGACCCCGGAGGTCGCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTGCCGATCGAATAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGCTCGTGTCTGTGTATGCGCGGGTCAACCCGTTGGGTTTCATCGAGAGCGCGTACCGC 335
Db 241 GGCTCGTGTCTGTGTATGCGCGGGTCAACCCGTTGGGTTTCATCGAAGCGCGTACCGC 300
QY 336 AAGTGTGTGACGCGGTGTGTACCGAGAGATCCACTACCTGACCGCGCGAGGAGGAC 395
Db 301 AAGTGTGTGACGCGGTGTGTAGGAGAGATCGTGTACCTGACCGCGCGAGGAGGAC 360
QY 396 CGCCACGTGTGGCGGAGGCAACTCGCCGATCGACAAAGGCGCGGTTGCGCGGAGGCC 455
Db 361 CGCCACGTGTGGCGGAGGCAACTCGCCGATCGATCGCGAGCGGTTCGTCGAGCGG 420
QY 456 CGGTGTGTGTCTGCGCGCGAGGCGGAGGTGAGTACGTGCGCTCGTCCGAGGTGAGC 515
Db 421 CGGTGTGTGTCTGCGCGCGAGGCGGAGGTGAGTACGTGCGCTCGTCCGAGGTGAGC 480
QY 516 TACATGACGTGTGCGCGCGCAGATGTGTGCGTGGCCACCGCGATGATCCGTTCTCTC 575
Db 481 TACATGACGTGTGCGCGCGCAGATGTGTGCGTGGCCACCGCGATGATCCGTTCTCTC 540
QY 576 GAGCAGCAGCGCAACCGTGCCTGATGGGCGCCCAACATGAGCGCGCGGTTCCG 635
Db 541 GAGCAGCAGCGCAACCGTGCCTGATGGGCGCCCAACATGAGCGCGCGGTTCCG 600
QY 636 CTGGTGGCGAGGAGGCGG 655
Db 601 CTGGTGGCGAGGAGGCGG 620

RESULT 9
US-08-757-653-138/c
; Sequence 138, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:

SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match 75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 91.0%; Pred. No. 4.6e-96;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCCAGTCTGGCGCGGATCAAGAGATCTTCGGACACAGCAGCTGTCC 95
Db 620 ATCAACATCCGTCCAGTCTGGCGCGGATCAAGAGATCTTCGGACACAGCAGCTGTAGC 561

QY 96 CAGTTTCATGACCAAGAAACACCCGTCTCGGGCTCACCAACAGCGCGCTGTCCGG 155
Db 560 CAATTCATGACCAAGAAACACCCGTCTCGGGCTTGACCAACAGCGCGCTGTCCGG 501

QY 156 CTGGCCCGGGTGTCTCTCCCGGAGCGGGCTGGAGTCCGCGACGTGACCCG 215
Db 500 CTGGCCCGGGTGTCTCTCACTGAGCGTCCGGCTGGAGTCCGCGACGTGACCCG 441

QY 216 TCCCACTAGCGCGGATGTCCCGGATCGAGACCCGAGGGTCCCAACATCGGTCTGATC 275
Db 440 TCGCACTAGCGCGGATGTCCCGGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381

QY 276 GCCTCGCTGTCTGTATGCGGGGTCAACCCGTTCGGTTTCATCGAGACGCGTACCGC 335
Db 380 GCCTCGCTGTCTGTATGCGGGGTCAACCCGTTCGGTTTCATCGAAACGCGTACCGC 321

QY 336 AAGTGTGTGACGCGGTGTCTACCGACGAGATCTACTCTGACCGCGACGAGGAGGAC 395
Db 320 AAGTGTGTGACGCGGTGTCTAGCGACGAGATCTACTCTGACCGCGACGAGGAGGAC 261

QY 396 CGCCAGTGTGGCGAGCCAACTCGCCGATCGACGAAAGGCGCGTTCGGGAGGCC 455
Db 260 CGCCAGTGTGGCGAGCCAACTTCGCCGATCGATCGCGGCGGTCTCTGTCGAGCGC 201

QY 456 CGGTGTGTCTCGCGCAAGCGGCGAGGTCTAGTCTGCTCTGCTCGGAGTGGAC 515
Db 200 CGGTGTGTCTCGCGCAAGCGGCGAGGTCTAGTCTGCTCTGCTCGGAGTGGAC 141

QY 516 TACATGAGCTGTGCGCGCGCAGATGTGTCTGGTGGCCACCGCGATGATCCGTTCTTC 575
Db 140 TACATGAGCTGTGCGCGCGCAGATGTGTCTGGTGGCCACCGCGATGATTCCTTCTCTG 81

QY 576 GAGCAGCAGCGCCAACTGTCCTGTATGGGGCCCAACATGACGCGCGAGGGTTCG 635
Db 80 GAGCAGCAGCGCCAACTGTCCTGTATGGGGCCCAACATGACGCGCGAGGGTTCG 21

QY 636 CTGGTGTGCGAGCGAGCGCC 655
Db 20 CTGGTGTGCGAGCGAGCGCC 1

RESULT 10

US-08-520-946-135
Sequence 135, Application US/08520946
Patent No. 6372424
GENERAL INFORMATION:
APPLICANT: BROW, MARY ANN D.
APPLICANT: LYAMICHEV, VICTOR I.
APPLICANT: OLIVE, DAVID M.
TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
TITLE OF INVENTION: PATHOGENS
NUMBER OF SEQUENCES: 160
CORRESPONDENCE ADDRESS:
ADDRESSEE: MEDLEN & CARROLL
STREET: 220 MONTGOMERY STREET, SUITE 2200
CITY: SAN FRANCISCO
STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA: US/08/520,946
APPLICATION NUMBER: US/08/520,946
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: CARROLL, PETER G.
REGISTRATION NUMBER: 32,837
REFERENCE/DOCKET NUMBER: FORS-01756
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 135:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-520-946-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 4.6e-96;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCCAGTCTGGCGCGGATCAAGAGATCTTCGGACACAGCAGCTGTCC 95
Db 1 ATCAACATCCGTCCAGTCTGGCGCGGATCAAGAGATCTTCGGACACAGCAGCTGAGC 60

QY 96 CAGTTTCATGACCAAGAAACACCCGTCTCGGGCTCACCAACAGCGCGCTGTCCGG 155
Db 61 CAATTCATGACCAAGAAACACCCGTCTCGGGCTTGACCAACAGCGCGCTGTCCGG 120

QY 156 CTGGCCCGGGTGTCTCTCCCGGAGCGGGCTGGAGTCCGCGACGTGACCCG 215
Db 121 CTGGCCCGGGTGTCTCTCACTGAGCGTCCGGCTGGAGTCCGCGACGTGACCCG 180

QY 216 TCCCACTAGCGCGGATGTCCCGGATCGAGACCCGAGGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCACTAGCGCGGATGTCCCGGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

QY 276 GCCTCGCTGTCTGTATGCGGGGTCAACCCGTTCGGTTTCATCGAGACGCGGTACCGC 335
Db 241 GCCTCGCTGTCTGTATGCGGGGTCAACCCGTTCGGTTTCATCGAAACGCGGTACCGC 300

QY 336 AAGTGTGTGACGCGGTGTCTACCGACGAGATCTACTCTGACCGCGACGAGGAGGAC 395
Db 301 AAGTGTGTGACGCGGTGTCTAGCGACGAGATCTACTCTGACCGCGACGAGGAGGAC 360

QY 396 CGCCAGTGTGGCGAGCGCCAACTCGCGGATCGACGAAAGCGCGGTTCGCGGAGGCC 455
Db 361 CGCCAGTGTGGCGAGCGCCAACTTCGCCGATCGATCGGACGCTCTCTGCTCGAGCGC 420

QY 456 CGGTGTCTCTCGCGCAAGCGCGGAGGTCTAGTCTGCTCTGCTCGGAGGTGGAC 515
Db 421 CGGTGTCTCTCGCGCAAGCGCGGAGGTCTAGTCTGCTCTGCTCGGAGGTGGAC 480

QY 516 TACATGAGCTGTGCGCGCGCAGATGTGTCTGGTGGCCACCGCGATGATCCGTTCTTC 575
Db 481 TACATGAGCTGTGCGCGCGCAGATGTGTCTGGTGGCCACCGCGATGATTCCTTCTCTG 540

QY 576 GAGCAGCAGCGCCAACTGTCCTGTATGGGGCCCAACATGACGCGCGAGGGTTCG 635
Db 541 GAGCAGCAGCGCCAACTGTCCTGTATGGGGCCCAACATGACGCGCGAGGGTTCG 600

QY 636 CTGGTGTGCGAGCGAGCGCC 655

Db 601 CTGTCCTAGCAGGCCCC 620

RESULT 11
US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-520-946-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 4.6e-96;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCGTCCAGTCGTGGCGCGCATCAAGGAGTTCTTCGGCACCCAGCAGCTGTC 95
Db 620 ATCAACATCGCGGTGGTTCGCGCGATCAAGGAGTTCTTCGGCACCCAGCAGCTGAGC 561

QY 96 CAGTTATGACACAGAACACCCGCTGTCCGGGCTCACCACAAAGCGCCGCTGTGGCG 155
Db 560 CAATTATGACACAGAACACCCGCTGTCCGGGTTGACCACAAAGCGCCGCTGTGGCG 501

QY 156 CTGGGCGCGGTGCTGTCCCGGAGCGCGGTGAGGTCCGCGACGTGACCCG 215
Db 500 CTGGGCGCGGTGCTGTACGTGAGCGTCCGGGCTGAGGTCCGCGACGTGACCCG 441

QY 216 TCCACTAGCGCGGATGTCCCGATCGACACCCGAGGTTCCCAACATCGTCTGATC 275
Db 440 TCGCACTAGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 381

QY 276 GGCTCGCTGCTGATGTCGGCGGTCAACCCGTTCCGTTTATCGAGACCGCTACCGC 335
Db 380 GGCTCGCTGCTGATGTCGGCGGTCAACCCGTTCCGTTTATCGAAACCGCTACCGC 321

QY 336 AAGGTGCTCGACCGCGGTGCTCACCAGCAGATCCACTACTGACCGCCGACGAGGAGGAC 395
Db 320 AAGTGTGTCAGCGCGGTGCTAGCAGCAGATCGTGTACTGTACCGCCGACGAGGAGGAC 261

QY 396 CGCCACGTGTGGCGCAGGCCAACCTCGCCGATCGACGACAAAGGCGCGGTTCGCGAGGCC 455
Db 260 CGCCACGTGTGGCGCAGGCCAAATTCGCCGATCGACGACGCGTTCGTCGAGCGC 201

QY 456 CGGTGTGTGTCCGCGCAAGCGCGGAGGTCCAGTACGTGCGCTCGCTCGCGAGGTGAC 515
Db 200 CGGTGTGTGTCCGCGCAAGCGCGGAGGTGAGTACGTGCGCTCGCTCGAGGTGAC 141

QY 516 TACATGACGTGTCCGCGCGCCAGATGTCGTCGGTGGCCACCGGATATCCCGTTCCTC 575
Db 140 TACATGACGTGTCCGCGCGCCAGATGTCGTCGGTGGCCACCGGATATTCCTTCCTG 81

QY 576 GAGCAGCAGCAGCAGCAGCAGTCCCTGATGCGGCGCCAAACATGACGCGCAGCGGTTCG 635
Db 80 GAGCAGCAGCAGCAGCAGCAGTCCCTGATGCGGCGCCAAACATGACGCGCAGCGGTTCG 21

QY 636 CTGTCGCGCAGCAGCGGCC 655
Db 20 CTGTCGCGTAGCGAGGCC 1

RESULT 12
US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 4.6e-96;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCGTCCAGTCGTGGCGCGCATCAAGGAGTTCTTCGGCACCCAGCAGCTGTC 95
Db 1 ATCAACATCGCGGTGGTTCGCGCGATCAAGGAGTTCTTCGGCACCCAGCAGCTGAGC 60

QY 96 CAGTTTCATGGACCAAGAAACACCCGCTGTCGGGGCTCAACCAAGGCGCCCTGTCGGCG 155
Db 61 CAATTTCATGGACCAAGAAACACCCGCTGTCGGGGTTGACCCCAAGGCGCGACTGTCGGCG 120
QY 156 CTGGGCGCGGGTGCTGCTCCCGGAGCGGGCGGGCTGAGGTCGGGACGTGCACCG 215
Db 121 CTGGGCGCGGGTGCTGCTCCCGGAGCGGGCGGGCTGAGGTCGGGACGTGCACCG 180
QY 216 TCCCACTACGCGCGGATGTCGCGATCGAGACCCCGGAGGGTCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GCGTCGCTGTCGCTGATGTCGCGGGTCAACCCGTTGCGGTTTCATCGAGCGCGTACCGC 335
Db 241 GCGTCGCTGTCGCTGATGTCGCGGGTCAACCCGTTGCGGTTTCATCGAAACGCGGTACCGC 300
QY 336 AAGTGTGTCGACGGGCTGTCACCGACGAGATCCACTACTGACCGCGACGAGGAGGAC 395
Db 301 AAGTGTGTCGACGGGCTGTTAGCGACGAGATCGTACTGACCGCGACGAGGAGGAC 360
QY 396 CGCCACGTGGTGCGCAGCGCCAACTCGCGATCGACGACAAAGGCGCGGTTCCGCGAGGCC 455
Db 361 CGCCACGTGGTGCGCAGCGCCAACTCGCGATCGATCGGACGGTCTGCTCGAGCGC 420
QY 456 CGGTGCTGTCGTCGCGCGCAAGCGCGCGAGGTGAGTCTGCTGCGAGTGGAC 515
Db 421 CGGTGCTGTCGTCGCGCGCAAGCGCGCGAGGTGAGTCTGCTGCGAGTGGAC 480
QY 516 TACATGGACGTGTCGCGCGCGCAGATGTTGTCGGTGGCCACCGCGATGATCCCGTTCCTC 575
Db 481 TACATGGACGTGTCGCGCGCGCAGATGTTGTCGGTGGCCACCGCGATGATCCCGTTCCTC 540
QY 576 GAGCAGCAGCGCCAAACCGTCCCTGATGGCGCCAAACATGACGCGCAGCGGTTCCG 635
Db 541 GAGCAGCAGCGCCAAACCGTCCCTGATGGCGCCAAACATGACGCGCAGCGGTTCCG 600
QY 636 CTGGTGGCGGAGGCGGCC 655
Db 601 CTGGTGGCGGAGGCGGCC 620

RESULT 13

US-09-655-378A-138/c

; Sequence 138, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; LYAMICHEV, VICTOR I.

; OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 138:

US-09-655-378A-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 4.6e-96;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCTGTGCGCGCATCAAGAGATTCTTCGGCACACAGCCAGCTGTCC 95
Db 620 ATCAACATCCGCGCGGTGTGTCGCCGATCAAGAGATTCTTCGGCACACAGCCAGCTGAGC 561
QY 96 CAGTTTCATGGACCAAGAAACACCCGCTGTCGGGGCTCACCCCAACAGCGCGCTGTGGCG 155
Db 560 CAATTTCATGGACCAAGAAACACCCGCTGTCGGGGTTGACCCCAACAGCGCGCTGTGGCG 501
QY 156 CTGGGCGCGGGTGCTGCTCCCGGAGCGGGCGGGCTGGAGTCCGCGACGTGCACCGC 215
Db 500 CTGGGCGCGGGTGCTGCTACGTGAGGTGCGCGGGCTGGAGTCCGCGACGTGCACCGC 441
QY 216 TCCCACTACGCGCGGATGTCGCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db 440 TCGCACTACGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381
QY 276 GCGTCGCTGTCGCTGATGTCGCGGGTCAACCCGTTTCGGGTTTCATCGAGACGCCGTACCGC 335
Db 380 GCGTCGCTGTCGCTGATGTCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCCGTACCGC 321
QY 336 AAGTGTGTCGACGGCGTGTACCGACGAGATCCACTACTGACCGCGACGAGGAGGAC 395
Db 320 AAGTGTGTCGACGGCGTGTAGCGACGAGATCGTGTACTCTGACCGCGACGAGGAGGAC 261
QY 396 CGCCACGTGGTGCGCAGCGCCAACTCGCGATCGACGACAAAGGCGCGGTTTCGGGAGGCC 455
Db 260 CGCCACGTGGTGCGCAGCGCCAACTTCGCCGATCGATGCGGACGGTCTGTCGAGCGC 201
QY 456 CGGTGCTGTCGTCGCCGCAAGCGCGGCGAGGTGAGTACGTGCCCTCTGTCGAGGTGGAC 515
Db 200 CGGTGCTGTCGTCGCCGCAAGCGCGGCGAGGTGAGTACGTGCCCTCTGTCGAGGTGGAC 141
QY 516 TACATGGACGTGTCGCGCGCGCAGATGTTGTCGGTGGCCACCGCGATGATCCCGTTCCTC 575
Db 140 TACATGGACGTGTCGCGCGCGCAGATGTTGTCGGTGGCCACCGCGATGATCCCGTTCCTC 81
QY 576 GAGCAGCAGCGACCGCAACCGTCCCTGATGGCGCCAAACATGACGCGCGAGCGGTCCG 635
Db 80 GAGCAGCAGCGACCGCAACCGTCCCTCATGGGGGCAACATGACGCGCGAGCGGTCCG 21
QY 636 CTGGTGGCGGAGGCGGCC 655
Db 20 CTGGTGGCGGAGGCGGCC 1

RESULT 14

US-08-757-653-136

; Sequence 136, Application US/08757653

; Patent No. 5843669

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

; APPLICANT: Lyamichev, Victor I.

; APPLICANT: Lyamichev, Natasha

; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

; TITLE OF INVENTION: Thermolabile FEN-1 Endonucleases

; NUMBER OF SEQUENCES: 190

```
;
;
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 397-8338
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 136:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-136
;
; Query Match 75.0%; Score 528.8; DB 2; Length 620;
; Best Local Similarity 90.8%; Pred. No. 9.4e-96;
; Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;
;
; QY 36 ATCAACATCCGTCAGTCGCGCGGATCAAGAGTCTTCGGCACACAGCAGCTGTC 95
; DB 1 ATCAACATCCGCGGTGTGCGCGGATCAAGAGTCTTCGGCACACAGCAGCTGAGC 60
;
; QY 96 CAGTTCATGACACAGAACACCCGCTGTCCGGGCTCAACCACAGCGCCGCTGTCCGGC 155
; DB 61 CAATTTCATGACACAGAACACCCGCTGTCCGGGTTGACCTACAGCGCCGACTGTCCGGC 120
;
; QY 156 CTGGGCCCCGGTGTCTCTCCGGGAGCGCGGGCTGAGGTCCGCGACGTGCACCG 215
; DB 121 CTGGGCCCCGGTGTCTCTACGTGAGCTGCGCGGCTGAGGTCCGCGACGTGCACCG 180
;
; QY 216 TCCCACTACCGCGCGATGTCCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
; DB 181 TCGCACTACCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
;
; QY 276 GGCTCGCTGTCTGATGTATGCGGGGTCAACCCGCTTCCGGTTCATCGAGAGCGCGTACCGC 335
;
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 137:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-137
;
; Query Match 75.0%; Score 528.8; DB 2; Length 620;
; Best Local Similarity 90.8%; Pred. No. 9.4e-96;
; Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;
;
; QY 36 ATCAACATCCGTCAGTCGCGCGGATCAAGAGTCTTCGGCACACAGCAGCTGTC 95
; DB 1 ATCAACATCCGCGGTGTGCGCGGATCAAGAGTCTTCGGCACACAGCAGCTGAGC 60
;
; QY 96 CAGTTCATGACACAGAACACCCGCTGTCCGGGCTCAACCACAGCGCCGCTGTCCGGC 155
; DB 61 CAATTTCATGACACAGAACACCCGCTGTCCGGGTTGACCTACAGCGCCGACTGTCCGGC 120
;
; QY 156 CTGGGCCCCGGTGTCTCTCCGGGAGCGCGGGCTGAGGTCCGCGACGTGCACCG 215
; DB 121 CTGGGCCCCGGTGTCTCTACGTGAGCTGCGCGGCTGAGGTCCGCGACGTGCACCG 180
;
; QY 216 TCCCACTACCGCGCGATGTCCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
; DB 181 TCGCACTACCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
;
; QY 276 GGCTCGCTGTCTGATGTATGCGGGGTCAACCCGCTTCCGGTTCATCGAGAGCGCGTACCGC 335
;
; QY 241 GGCTCGCTGTCTGATGTATGCGGGGTCAACCCGCTTCCGGTTCATCGAGAGCGCGTACCGC 300
;
; QY 336 AAGTGTGTGACGCGCGTGTACCGACGAGATCCACTACCTGACCGCGCGAGGAGGAC 395
; DB 301 AAGTGTGTGACGCGCGTGTGAGCGAGATCTGTACCTGACCGCGCGAGGAGGAC 360
;
; QY 396 CGCCACGTGTGCGCGAGGCCAACTCCCGATCGACGACAAAGGCGCGGTTCGCGAGGCC 455
; DB 361 CGCCACGTGTGCGCACAGGCCAACTCCCGATCGATCGCGACGCTGCTTCGTCGAGCGC 420
;
; QY 456 CGGCTGTGTCTCGCCCGAAGCGCGGAGGTCAAGTACGTGACCTGCTCGCGAGGTGGAC 515
; DB 421 CGGCTGTGTCTCGCCCGAAGCGCGGAGGTGAGTACGTGCTGCTGTGAGGTGGAC 480
;
; QY 516 TACATGACGCTGTCCGCGCGCAGATGCTGCGGTGCGCCACCGGATGATCCCGTCTCTC 575
; DB 481 TACATGACGCTGTCCGCGCGCAGATGCTGCGGTGCGCCACCGGATGATTCCTTCTG 540
;
; QY 576 GAGCAAGACGACGACCAACCGTGTCCCTGATGGGGGCCAAACATGCGAGCGCGGCTTCG 635
```

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Db      241  GGCTCGCTGTCGGTGTACGCGCGGTCAACCGTTTCGGGTTTCATCGAAACGCCGTACCGC 300
Qy      336  AAGTGTGTCGACGGGTGTCACCGACGAGATCCACTACCTGACCGCCGACGAGAGGAC 395
Db      301  AAGTGTGTCGACGGCGTGGTTAGCGACGAGATCGTGTACTCTGACCGCCGACGAGAGGAC 360
Qy      396  CGCCACGTGGTGGCGCAGGCCAACTCGCCGATCGACGACAAGGGCCGGTTCCGGAGGCC 455
Db      361  CGCCACGTGGTGGCNCAGGCCAAATTCCGCCGATCGATGCGGACGGTCGCTTCGTCGAGCCG 420
Qy      456  CGGGTGTGTCGTCGCGCGCAAGCGCGCGGAGGTGAGTACGTGCCCCCTCGTCGAGGTGGAC 515
Db      421  CGCGTGTGTCGTCGCGCGCAAGCGCGCGGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGAC 480
Qy      516  TACATGGACGTGTCCGCCGCGCAGATGTTGTGTCGGTGGCCACCGCGATGATCCCGTTCCTC 575
Db      481  TACATGGACGTCTCGCCCCCGCCAGATGTTGTGCGTGGCCACCGCGATGATTCCCTTCCTG 540
Qy      576  GAGCACGACGACGCCCAACCGTGCCCTGATGGCGGCCAAACATGACGCGCCAGGCGGTTCGG 635
Db      541  GAGCACGACGACGCCCAACCGTGCCCTCATGGGGGCAAAACATGACGCGCCAGGCGGTGCCG 600
Qy      636  CTGGTGCACGACGAGCGGCC 655
Db      601  CTGGTCCGTAGCGAGGCCCC 620
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Search completed: August 19, 2004, 14:45:47
Job time : 81.4446 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 14:25:11 ; Search time 407.972 Seconds
(without alignments)
8488.468 Million cell updates/sec

Title: US-09-285-306-7
Perfect score: 705
Sequence: 1 cccaggacgtgagcgatc.....ggcgatcgacgcggcgacgt 705

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 1.0

Searched: 3228839 seqs, 2456066551 residues

Total number of hits satisfying chosen parameters: 6457678

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications NA:*

- 1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
- 2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
- 3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
- 4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
- 5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
- 6: /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
- 7: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*
- 8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*
- 9: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq:*
- 10: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
- 11: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
- 12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
- 13: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
- 14: /cgn2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
- 15: /cgn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
- 16: /cgn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*
- 17: /cgn2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
- 18: /cgn2_6/ptodata/1/pubpna/US60_NEW_PUB.seq:*
- 19: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	705	100.0	705	US-09-285-306-4	Sequence 4, Appli
2	705	100.0	705	US-09-285-306-5	Sequence 5, Appli
3	705	100.0	705	US-09-285-306-6	Sequence 6, Appli
4	705	100.0	705	US-09-285-306-7	Sequence 7, Appli
5	705	100.0	705	US-09-285-306-8	Sequence 8, Appli
6	705	100.0	705	US-09-285-306-9	Sequence 9, Appli
7	705	100.0	705	US-09-285-306-12	Sequence 12, Appli
8	705	100.0	705	US-09-285-306-13	Sequence 13, Appli
9	705	100.0	705	US-09-285-306-14	Sequence 14, Appli
10	705	100.0	705	US-09-285-306-16	Sequence 16, Appli
11	705	100.0	705	US-09-285-306-24	Sequence 24, Appli
12	703.4	99.8	705	US-09-285-306-17	Sequence 17, Appli
13	695	98.6	705	US-09-285-306-3	Sequence 3, Appli
14	693.4	98.4	705	US-09-285-306-11	Sequence 11, Appli

15	691	98.0	705	9	US-09-285-306-10	Sequence 10, Appli
16	691	98.0	3444	13	US-10-282-122A-25737	Sequence 25737, A
17	687	97.4	687	9	US-09-285-306-18	Sequence 18, Appli
18	687	97.4	687	9	US-09-285-306-19	Sequence 19, Appli
19	687	97.4	687	9	US-09-285-306-20	Sequence 20, Appli
20	687	97.4	687	9	US-09-285-306-21	Sequence 21, Appli
21	687	97.4	687	9	US-09-285-306-22	Sequence 22, Appli
22	687	97.4	687	9	US-09-285-306-23	Sequence 23, Appli
23	687	97.4	687	9	US-09-285-306-25	Sequence 25, Appli
24	687	97.4	687	9	US-09-285-306-27	Sequence 27, Appli
25	660.2	93.6	705	9	US-09-285-306-143	Sequence 143, App
26	658.6	93.4	705	9	US-09-285-306-144	Sequence 144, App
27	655.4	93.0	705	9	US-09-285-306-87	Sequence 87, Appli
28	655.4	93.0	705	9	US-09-285-306-88	Sequence 88, Appli
29	655.4	93.0	705	9	US-09-285-306-90	Sequence 90, Appli
30	655.4	93.0	705	9	US-09-285-306-92	Sequence 92, Appli
31	655.4	93.0	705	9	US-09-285-306-96	Sequence 96, Appli
32	653.8	92.7	705	9	US-09-285-306-84	Sequence 84, Appli
33	653.8	92.7	705	9	US-09-285-306-86	Sequence 86, Appli
34	653.8	92.7	705	9	US-09-285-306-93	Sequence 93, Appli
35	653.8	92.7	705	9	US-09-285-306-94	Sequence 94, Appli
36	653.8	92.7	705	9	US-09-285-306-95	Sequence 95, Appli
37	652.2	92.5	705	9	US-09-285-306-85	Sequence 85, Appli
38	652.2	92.5	705	9	US-09-285-306-89	Sequence 89, Appli
39	652.2	92.5	705	9	US-09-285-306-91	Sequence 91, Appli
40	652.2	92.5	705	9	US-09-285-306-181	Sequence 181, App
41	642.2	91.1	687	9	US-09-285-306-146	Sequence 146, App
42	642.2	91.1	687	9	US-09-285-306-148	Sequence 148, App
43	637.4	90.4	687	9	US-09-285-306-100	Sequence 100, App
44	635.8	90.2	687	9	US-09-285-306-99	Sequence 99, Appli
45	635.8	90.2	687	9	US-09-285-306-145	Sequence 145, App

ALIGNMENTS

RESULT 1
US-09-285-306-4
; Sequence 4, Application US/09285306A
; Publication NO. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-4

Query Match	100.0%	Score 705;	DB 9;	Length 705;
Best Local Similarity	100.0%	Pred. No. 2.1e-154;		
Matches	705;	Conservative	0;	Mismatches 0; Indels 0; Gaps 0;
QY	1	CCAGGACGTGAGCGGATCATCACCGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG	60	
Db	1	CCAGGACGTGAGCGGATCATCACCGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG	60	
QY	61	CGATCAAGAGGTTCTTCGGCACCACCGAGCTGCCAGTTCTATGACACAGACACCCCG	120	
Db	61	CGATCAAGAGGTTCTTCGGCACCACCGAGCTGCCAGTTCTATGACACAGACACCCCG	120	
QY	121	TGTCGGGGCTACCCACAGGCGCCCTGTGCGCGCTGGCGCGGTGTGTGTCCCGGG	180	
Db	121	TGTCGGGGCTACCCACAGGCGCCCTGTGCGCGCTGGCGCGGTGTGTGTCCCGGG	180	

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QY 181 AGCGGCGGGCTCGAGGTCCGCAAGTGCACCGTCCCCTACCGCGGATGTCCCGA 240
Db 181 AGCGGCGGGCTCGAGGTCCGCAAGTGCACCGTCCCCTACCGCGGATGTCCCGA 240
QY 241 TCAGAGACCCCGGAGGTCCCAACATCGTCTGTGATCGGCTCGCTCTCGGTGTATCGCGGG 300
Db 241 TCAGAGACCCCGGAGGTCCCAACATCGTCTGTGATCGGCTCGCTCTCGGTGTATCGCGGG 300
QY 301 TCAACCCGTTCCGGGTTTCATCGAGACGCGCTACCGAAGGTGGTTCGAGCGGTGTACCG 360
Db 301 TCAACCCGTTCCGGGTTTCATCGAGACGCGCTACCGAAGGTGGTTCGAGCGGTGTACCG 360
QY 361 ACAGATCCACTACTGACCGCCACGAGGAGGACCGCCAGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCGCCACGAGGAGGACCGCCAGTGGTGGCGAGGCCAACT 420
QY 421 CGCGATCGACGACAAGGGCGCGGTTTCGCGGAGGCGCGGCTGCTGCTCCGCGCAAGCGG 480
Db 421 CGCGATCGACGACAAGGGCGCGGTTTCGCGGAGGCGCGGCTGCTGCTCCGCGCAAGCGG 480
QY 481 GCGAGGTTCGAGTACGTGGCTTCGTCGAGGTGGACTACATGGACGTGTCCGCGCCGAGA 540
Db 481 GCGAGGTTCGAGTACGTGGCTTCGTCGAGGTGGACTACATGGACGTGTCCGCGCCGAGA 540
QY 541 TGGTGTTCGTTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCGCAACCGTGCC 600
Db 541 TGGTGTTCGTTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCGCAACCGTGCC 600
QY 601 TGATGGCGCCCAACATGACGCGCCAGCGGTTCCGCTGCTGCGCAGGAGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATGACGCGCCAGCGGTTCCGCTGCTGCGCAGGAGCGCGCTGG 660
QY 661 TGGCACCGCATGGAGCTGCGCGCGCGGATTCGACGCGGCGACGT 705
Db 661 TGGCACCGCATGGAGCTGCGCGCGCGGATTCGACGCGGCGACGT 705
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RESULT 2

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US-09-285-306-5
; Sequence 5, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 5
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-5
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Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2,1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCCAGTGTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCCAGTGTGGCGG 60
QY 61 CGATCAAGGAGTTCTTCGGCACACGACGAGTGTCCAGTTTCATGACACAGAACCCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACACGACGAGTGTCCAGTTTCATGACACAGAACCCCGC 120
QY 121 TGTCCGGGCTCACCCACAAGCGCGCTGTTCGGCGCTGGGCGCGGTGGTGTGTCCCGG 180
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```
Db 121 TGTCCGGGCTCACCCACAAGCGCGCTGTTCGGCGCTGGGCGCGGTGGTGTGTCCCGG 180
QY 181 AGCGGCGGGCTCGAGGTTCGCGACGTGCACCGTCCCCTACCGCGGATGTCCCGA 240
Db 181 AGCGGCGGGCTCGAGGTTCGCGACGTGCACCGTCCCCTACCGCGGATGTCCCGA 240
QY 241 TCAGAGACCCCGGAGGTCCCAACATCGTCTGTGATCGGCTCGCTCTCGGTGTATCGCGGG 300
Db 241 TCAGAGACCCCGGAGGTCCCAACATCGTCTGTGATCGGCTCGCTCTCGGTGTATCGCGGG 300
QY 301 TCAACCCGTTCCGGGTTTCATCGAGACGCGCTACCGAAGGTGGTTCGAGCGGTGTACCG 360
Db 301 TCAACCCGTTCCGGGTTTCATCGAGACGCGCTACCGAAGGTGGTTCGAGCGGTGTACCG 360
QY 361 ACAGATCCACTACTGACCGCCACGAGGAGGACCGCCAGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTGACCGCCACGAGGAGGACCGCCAGTGGTGGCGAGGCCAACT 420
QY 421 CGCGATCGACGACAAGGGCGCGGTTTCGCGGAGGCGCGGCTGCTGCTCCGCGCAAGCGG 480
Db 421 CGCGATCGACGACAAGGGCGCGGTTTCGCGGAGGCGCGGCTGCTGCTCCGCGCAAGCGG 480
QY 481 GCGAGGTTCGAGTACGTGGCTTCGTCGAGGTGGACTACATGGACGTGTCCGCGCCGAGA 540
Db 481 GCGAGGTTCGAGTACGTGGCTTCGTCGAGGTGGACTACATGGACGTGTCCGCGCCGAGA 540
QY 541 TGGTGTTCGTTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCGCAACCGTGCC 600
Db 541 TGGTGTTCGTTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCGCAACCGTGCC 600
QY 601 TGATGGCGCCCAACATGACGCGCCAGCGGTTCCGCTGCTGCGCAGGAGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATGACGCGCCAGCGGTTCCGCTGCTGCGCAGGAGCGCGCTGG 660
QY 661 TGGCACCGCATGGAGCTGCGCGCGCGGATTCGACGCGGCGACGT 705
Db 661 TGGCACCGCATGGAGCTGCGCGCGCGGATTCGACGCGGCGACGT 705
```

RESULT 3

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US-09-285-306-6
; Sequence 6, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 6
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-6
```

```
Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2,1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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```
QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCCAGTGTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCCAGTGTGGCGG 60
QY 61 CGATCAAGGAGTTCTTCGGCACACGACGAGTGTCCAGTTTCATGACACAGAACCCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACACGACGAGTGTCCAGTTTCATGACACAGAACCCCGC 120
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QY 61 CGATCAAGGAGTCTTTCGGCACACGAGCTGTCCAGTTTCATGACACGAGAACACCGC 120
Db 61 CGATCAAGGAGTCTTTCGGCACACGAGCTGTCCAGTTTCATGACACGAGAACACCGC 120
QY 121 TGTCCGGGCTCAACCAAGCGCCCTGTTCGGCGCTGGGCGCGGCTGTGTCCCGGG 180
Db 121 TGTCCGGGCTCAACCAAGCGCCCTGTTCGGCGCTGGGCGCGGCTGTGTCCCGGG 180
QY 181 AGCGGGCGGGCTGGAGTTCGGACGTGACACCGTCCACTACGGCGGATGTGCCGA 240
Db 181 AGCGGGCGGGCTGGAGTTCGGACGTGACACCGTCCACTACGGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGCTCCCAACTCGTCTGATCGCTCGCTCGCTGATCGCGGG 300
Db 241 TCGAGACCCCGAGGCTCCCAACTCGTCTGATCGCTCGCTCGCTGATCGCGGG 300
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGTACCGCAAGGTGGTTCGACGGGTCGTACCG 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGTACCGCAAGGTGGTTCGACGGGTCGTACCG 360
QY 361 ACAGATCCACTACTACCGCGCGACGAGGAGGACCGCAGCTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTACCGCGCGACGAGGAGGACCGCAGCTGGTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACGACAAGGCGCGGTTTCGGGAGGCGCCGGTGTGGTCCGCGCAAGCGG 480
Db 421 CGCCGATCGACGACAAGGCGCGGTTTCGGGAGGCGCCGGTGTGGTCCGCGCAAGCGG 480
QY 481 GCAGAGTCGAGTACGTGCTCGCTCGTTCGAGTGGATACATGAGCTGTCCCGCGCCAGA 540
Db 481 GCAGAGTCGAGTACGTGCTCGCTCGTTCGAGTGGATACATGAGCTGTCCCGCGCCAGA 540
QY 541 TGTGTCTGTGGCGCACCGCATGATCCCTGCTCGGTCGCTGGTGGCGAGGCGCGCTGG 600
Db 541 TGTGTCTGTGGCGCACCGCATGATCCCTGCTCGGTCGCTGGTGGCGAGGCGCGCTGG 600
QY 601 TGATGGCGCGCAACATCGACGCGCGGCTTCGGTGTGGTGGCGAGGCGCGCTGG 660
Db 601 TGATGGCGCGCAACATCGACGCGCGGCTTCGGTGTGGTGGCGAGGCGCGCTGG 660
QY 661 TGGGACCGGCGATGGAGCTGCGCGCGCGATCGACCGCGGCGAGT 705
Db 661 TGGGACCGGCGATGGAGCTGCGCGCGCGATCGACCGCGGCGAGT 705
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RESULT 6

US-09-285-306-9

; Sequence 9, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; EARLIER FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 9

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-9

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2.1e-154;

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60

```
Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
QY 61 CGATCAAGGAGTCTTTCGGCACACGAGCTGTCCAGTTTCATGACACGAGAACACCGC 120
Db 61 CGATCAAGGAGTCTTTCGGCACACGAGCTGTCCAGTTTCATGACACGAGAACACCGC 120
QY 121 TGTCCGGGCTCAACCAAGCGCCCTGTTCGGCGCTGGGCGCGGCTGTGTCCCGGG 180
Db 121 TGTCCGGGCTCAACCAAGCGCCCTGTTCGGCGCTGGGCGCGGCTGTGTCCCGGG 180
QY 181 AGCGGGCGGGCTGGAGTTCGGACGTGACACCGTCCACTACGGCGGATGTGCCGA 240
Db 181 AGCGGGCGGGCTGGAGTTCGGACGTGACACCGTCCACTACGGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGCTCCCAACTCGTCTGATCGCTCGCTCGCTGATCGCGGG 300
Db 241 TCGAGACCCCGAGGCTCCCAACTCGTCTGATCGCTCGCTCGCTGATCGCGGG 300
QY 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGTACCGCAAGGTGGTTCGACGGGTCGTACCG 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGTACCGCAAGGTGGTTCGACGGGTCGTACCG 360
QY 361 ACAGATCCACTACTACCGCGCGACGAGGAGGACCGCAGCTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTACCGCGCGACGAGGAGGACCGCAGCTGGTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACGACAAGGCGCGGTTTCGGGAGGCGCCGGTGTGGTCCGCGCAAGCGG 480
Db 421 CGCCGATCGACGACAAGGCGCGGTTTCGGGAGGCGCCGGTGTGGTCCGCGCAAGCGG 480
QY 481 GCAGAGTCGAGTACGTGCTCGCTCGTTCGAGTGGATACATGAGCTGTCCCGCGCCAGA 540
Db 481 GCAGAGTCGAGTACGTGCTCGCTCGTTCGAGTGGATACATGAGCTGTCCCGCGCCAGA 540
QY 541 TGTGTCTGTGGCGCACCGCATGATCCCTGCTCGGTCGCTGGTGGCGAGGCGCGCTGG 600
Db 541 TGTGTCTGTGGCGCACCGCATGATCCCTGCTCGGTCGCTGGTGGCGAGGCGCGCTGG 600
QY 601 TGATGGCGCGCAACATCGACGCGCGGCTTCGGTGTGGTGGCGAGGCGCGCTGG 660
Db 601 TGATGGCGCGCAACATCGACGCGCGGCTTCGGTGTGGTGGCGAGGCGCGCTGG 660
QY 661 TGGGACCGGCGATGGAGCTGCGCGCGCGATCGACCGCGGCGAGT 705
Db 661 TGGGACCGGCGATGGAGCTGCGCGCGCGATCGACCGCGGCGAGT 705
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RESULT 7

US-09-285-306-12

; Sequence 12, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; EARLIER FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 12

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-12

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2.1e-154;

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGCGGATCAACCGCAGACCCCTGATCAATCCGTCCAGTCTGTGGCGG 60
Db 1 CCCAGGAGCTGGAGCGGATCAACCGCAGACCCCTGATCAATCCGTCCAGTCTGTGGCGG 60

QY 61 CGATCAAGGAGTCTTCCGCGACCGAGCTGTCCAGTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGGAGTCTTCCGCGACCGAGCTGTCCAGTTCATGACACAGAACACCCGC 120

QY 121 TGTCCGGGCTCAACCCACAAGCGCCCTGTCCGGCTGTGGCCCGGGTGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCAACCCACAAGCGCCCTGTCCGGCTGTGGCCCGGGTGTCTGTCCCGGG 180

QY 181 AGCGGCGCGGCTGAGGTCCGCGAGTCACCGCTCCACCTACCGCGCGGATGTGCCGA 240
Db 181 AGCGGCGCGGCTGAGGTCCGCGAGTCACCGCTCCACCTACCGCGCGGATGTGCCGA 240

QY 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGTTCGCTGTCCGGTGTATGCCCGG 300
Db 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGTTCGCTGTCCGGTGTATGCCCGG 300

QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGTGTGTCAGCGGCGCAACT 420
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGTGTGTCAGCGGCGCAACT 420

QY 361 AGGAGTCCACTACCTGACCGCGCAGGAGGACCGCACGTGTGGCGAGGCGCAACT 480
Db 361 AGGAGTCCACTACCTGACCGCGCAGGAGGACCGCACGTGTGGCGAGGCGCAACT 480

QY 421 CGCGGATCGACGACAAAGGCGCGTTCGCGAGCGCGGTTGCTGCTCCCGCAAGGCGG 540
Db 421 CGCGGATCGACGACAAAGGCGCGTTCGCGAGCGCGGTTGCTGCTCCCGCAAGGCGG 540

QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACCGTGTGCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACCGTGTGCC 600

QY 601 TGATGGCGCCCAACATGACGCGCGGTTCCGCTGTGCGAGCGAGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATGACGCGCGGTTCCGCTGTGCGAGCGAGCGCGCTGG 660

QY 661 TGGGCACCGGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
Db 661 TGGGCACCGGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705

RESULT 8
US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 13
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-13

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGCGGATCAACCGCAGACCCCTGATCAATCCGTCCAGTCTGTGGCGG 60
Db 1 CCCAGGAGCTGGAGCGGATCAACCGCAGACCCCTGATCAATCCGTCCAGTCTGTGGCGG 60

QY 61 CGATCAAGGAGTCTTCCGCGACCGAGCTGTCCAGTTCATGACACAGAACACCCGC 120
Db 61 CGATCAAGGAGTCTTCCGCGACCGAGCTGTCCAGTTCATGACACAGAACACCCGC 120

QY 121 TGTCCGGGCTCAACCCACAAGCGCCCTGTCCGGCTGTGGCCCGGGTGTCTGTCCCGGG 180
Db 121 TGTCCGGGCTCAACCCACAAGCGCCCTGTCCGGCTGTGGCCCGGGTGTCTGTCCCGGG 180

QY 181 AGCGGCGCGGCTGAGGTCCGCGAGTCACCGCTCCACCTACCGCGCGGATGTGCCGA 240
Db 181 AGCGGCGCGGCTGAGGTCCGCGAGTCACCGCTCCACCTACCGCGCGGATGTGCCGA 240

QY 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGTTCGCTGTCCGGTGTATGCCCGG 300
Db 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGTTCGCTGTCCGGTGTATGCCCGG 300

QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGTGTGTCAGCGGCGCAACT 420
Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGTGTGTCAGCGGCGCAACT 420

QY 361 AGGAGTCCACTACCTGACCGCGCAGGAGGACCGCACGTGTGGCGAGGCGCAACT 480
Db 361 AGGAGTCCACTACCTGACCGCGCAGGAGGACCGCACGTGTGGCGAGGCGCAACT 480

QY 421 CGCGGATCGACGACAAAGGCGCGTTCGCGAGCGCGGTTGCTGCTCCCGCAAGGCGG 540
Db 421 CGCGGATCGACGACAAAGGCGCGTTCGCGAGCGCGGTTGCTGCTCCCGCAAGGCGG 540

QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACCGTGTGCC 600
Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACCGTGTGCC 600

QY 601 TGATGGCGCCCAACATGACGCGCGGTTCCGCTGTGCGAGCGAGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATGACGCGCGGTTCCGCTGTGCGAGCGAGCGCGCTGG 660

QY 661 TGGGCACCGGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
Db 661 TGGGCACCGGCATGAGCTGCGCGCGCGATCGACGCGCGACGT 705

RESULT 9
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-14

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGATCAACCGCAGACCCCTGATCAACATCGTCCAGTGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGATCAACCGCAGACCCCTGATCAACATCGTCCAGTGTGGCGG 60

Qy 61 CGATCAAGGAGTTCTTTCGGCACCAGCCAGCTGTCCAGTTCATGACAGCAACCCCGC 120
Db 61 CGATCAAGGAGTTCTTTCGGCACCAGCCAGCTGTCCAGTTCATGACAGCAACCCCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGCTGGGCGCGGTGTCTGTCCCGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGCTGGGCGCGGTGTCTGTCCCGG 180

Qy 181 AGCGGCGGGCTGGAGTTCGCGACGTGACACCGTCCCACTACGCGCGGATGTCCCGG 240
Db 181 AGCGGCGGGCTGGAGTTCGCGACGTGACACCGTCCCACTACGCGCGGATGTCCCGG 240

Qy 241 TCAGAGCCCGGAGGTCGCAACATCGTCTGATCGGCTCGCTGTGATCGCGGG 300
Db 241 TCAGAGCCCGGAGGTCGCAACATCGTCTGATCGGCTCGCTGTGATCGCGGG 300

Qy 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCAGCGGTGTACCG 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCAGCGGTGTACCG 360

Qy 361 ACAGATCCACTACTCGTACCGCGGTCGCGAGGACCGCCAGCTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTCGTACCGCGGTCGCGAGGACCGCCAGCTGGTGGCGAGGCCAACT 420

Qy 421 CGCGATCGAGCAAGGCGGTCGCGAGGCGCGGTTCGCGAGGCGCGGCTGGTTCGCGCGAAGCGG 480
Db 421 CGCGATCGAGCAAGGCGGTCGCGAGGCGCGGTTCGCGAGGCGCGGCTGGTTCGCGCGAAGCGG 480

Qy 481 GCGAGTTCGAGTACGTGCTTCGAGGTGGACTACATGGAGCTGTTCGCGCGCGCGCAGA 540
Db 481 GCGAGTTCGAGTACGTGCTTCGAGGTGGACTACATGGAGCTGTTCGCGCGCGCGCAGA 540

Qy 541 TGTGTGCGTGGCCACCGCGATGATCCGTTCTTCGAGACGACGACGCAACCGTGC 600
Db 541 TGTGTGCGTGGCCACCGCGATGATCCGTTCTTCGAGACGACGACGCAACCGTGC 600

Qy 601 TGATGGCGCCAAATCGACGCGCGGTCGCGCGCGATCGACGCGCGGCGT 705
Db 601 TGATGGCGCCAAATCGACGCGCGGTCGCGCGCGATCGACGCGCGGCGT 705

Qy 661 TGGGCAACCGGATGGAGCTGCGCGCGGCGATCGACGCGCGGCGT 705
Db 661 TGGGCAACCGGATGGAGCTGCGCGCGGCGATCGACGCGCGGCGT 705

RESULT 10

US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; LENGTH: 705
; TYPE: DNA

RESULT 11

US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24

; ORGANISM: Mycobacterium avium
US-09-285-306-16

Query Match 100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGATCAACCGCAGACCCCTGATCAACATCGTCCAGTGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGATCAACCGCAGACCCCTGATCAACATCGTCCAGTGTGGCGG 60

Qy 61 CGATCAAGGAGTTCTTTCGGCACCAGCCAGCTGTCCAGTTCATGACAGCAACCCCGC 120
Db 61 CGATCAAGGAGTTCTTTCGGCACCAGCCAGCTGTCCAGTTCATGACAGCAACCCCGC 120

Qy 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGCTGGGCGCGGTGTCTGTCCCGG 180
Db 121 TGTCCGGGCTCACCCACAAGCGCGCTGTCCGGCTGGGCGCGGTGTCTGTCCCGG 180

Qy 181 AGCGGCGGGCTGGAGTTCGCGACGTGACACCGTCCCACTACGCGCGGATGTCCCGG 240
Db 181 AGCGGCGGGCTGGAGTTCGCGACGTGACACCGTCCCACTACGCGCGGATGTCCCGG 240

Qy 241 TCAGAGCCCGGAGGTCGCAACATCGTCTGATCGGCTCGCTGTGATCGCGGG 300
Db 241 TCAGAGCCCGGAGGTCGCAACATCGTCTGATCGGCTCGCTGTGATCGCGGG 300

Qy 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCAGCGGTGTACCG 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGGTACCGCAAGGTGGTTCAGCGGTGTACCG 360

Qy 361 ACAGATCCACTACTCGTACCGCGGTCGCGAGGACCGCCAGCTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTCGTACCGCGGTCGCGAGGACCGCCAGCTGGTGGCGAGGCCAACT 420

Qy 421 CGCGATCGAGCAAGGCGGTCGCGAGGCGCGGTTCGCGAGGCGCGGCTGGTTCGCGCGAAGCGG 480
Db 421 CGCGATCGAGCAAGGCGGTCGCGAGGCGCGGTTCGCGAGGCGCGGCTGGTTCGCGCGAAGCGG 480

Qy 481 GCGAGTTCGAGTACGTGCTTCGAGGTGGACTACATGGAGCTGTTCGCGCGCGCGCAGA 540
Db 481 GCGAGTTCGAGTACGTGCTTCGAGGTGGACTACATGGAGCTGTTCGCGCGCGCGCAGA 540

Qy 541 TGTGTGCGTGGCCACCGCGATGATCCGTTCTTCGAGACGACGACGCAACCGTGC 600
Db 541 TGTGTGCGTGGCCACCGCGATGATCCGTTCTTCGAGACGACGACGCAACCGTGC 600

Qy 601 TGATGGCGCCAAATCGACGCGCGGTCGCGCGCGATCGACGCGCGGCGT 705
Db 601 TGATGGCGCCAAATCGACGCGCGGTCGCGCGCGATCGACGCGCGGCGT 705

Qy 661 TGGGCAACCGGATGGAGCTGCGCGCGGCGATCGACGCGCGGCGT 705
Db 661 TGGGCAACCGGATGGAGCTGCGCGCGGCGATCGACGCGCGGCGT 705

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RESULT 12
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gintaras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Afymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpo
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/08
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181

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; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
;
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-3

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 4.3e-152;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCCAGACGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 1 CCCAGACGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCAGCTGTCCCAAGTTTCATGGACCAAGAACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCAGCTGTCCCAAGTTTCATGGACCAAGAACCCGC 120
QY 121 TGTGGGGCTCACCAAGCGCGCCTGTGCGGCGTGTGGCGCGTGGCGCGGTGTGTCTGCCGG 180
Db 121 TGTGGGGCTCACCAAGCGCGCCTGTGCGGCGTGTGGCGCGTGGCGCGGTGTGTCTGCCGG 180
QY 181 AGCGGCGCGGCTGGAGGTCCCAACATCGGTCTGATTCGGCTCGCTGTCTGATTCGGCGGG 300
Db 181 AGCGGCGCGGCTGGAGGTCCCAACATCGGTCTGATTCGGCTCGCTGTCTGATTCGGCGGG 300
QY 241 TCAGACCCCGGAGGTTCCCAACATCGGTCTGATTCGGCTCGCTGTCTGATTCGGCGGG 360
Db 241 TCAGACCCCGGAGGTTCCCAACATCGGTCTGATTCGGCTCGCTGTCTGATTCGGCGGG 360
QY 301 TCACCCGTTCCGTTTCATCGAGACGCGCTGACCGAGCGCTGACCGAGGTCGAGCGGTGTCA 420
Db 301 TCACCCGTTCCGTTTCATCGAGACGCGCTGACCGAGCGCTGACCGAGGTCGAGCGGTGTCA 420
QY 361 ACAGATCCACTACCTGACCGCGAGAGGAGACCGCACGTCGTCGTCGTCGTCGTCGTCGTC 480
Db 361 ACAGATCCACTACCTGACCGCGAGAGGAGACCGCACGTCGTCGTCGTCGTCGTCGTCGTC 480
QY 421 CGCCGATCGACGCAAGGCGCGGTTCCGCGAGCGCGGTCGTCGTCGTCGTCGTCGTCGTCGTC 600
Db 421 CGCCGATCGACGCAAGGCGCGGTTCCGCGAGCGCGGTCGTCGTCGTCGTCGTCGTCGTCGTC 600
QY 481 GCGAGTCCAGTACCTGTCGTCGAGTGGAGTACATGAGCGTGTGTGTGTGTGTGTGTGTGTGT 705
Db 481 GCGAGTCCAGTACCTGTCGTCGAGTGGAGTACATGAGCGTGTGTGTGTGTGTGTGTGTGTGT 705
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RESULT 14

US-09-285-306-11

; Sequence 11, Application US/09285306A

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; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
;
; NAME/KEY: modified base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-11
```

```
Query Match      98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 1e-151;
Matches 697; Conservative 8; Mismatches 8; Indels 0; Gaps 0;

QY 1 CCCAGACGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db 1 CCCAGACGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCAGCTGTCCCAAGTTTCATGGACCAAGAACCCGC 120
Db 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCAGCTGTCCCAAGTTTCATGGACCAAGAACCCGC 120
QY 121 TGTGGGGCTCACCAAGCGCGCCTGTGCGGCGTGTGGCGCGTGGCGCGGTGTGTCTGCCGG 180
Db 121 TGTGGGGCTCACCAAGCGCGCCTGTGCGGCGTGTGGCGCGTGGCGCGGTGTGTCTGCCGG 180
QY 181 AGCGGCGCGGCTGGAGGTCCCGACGTCGACCCGTCACACTACGCGCGGATGTGCCCGA 240
Db 181 AGCGGCGCGGCTGGAGGTCCCGACGTCGACCCGTCACACTACGCGCGGATGTGCCCGA 240
QY 241 TCAGACCCCGGAGGTTCCCAACATCGGTCTGATTCGGCTCGCTGTCTGATTCGGCGGG 300
Db 241 TCAGACCCCGGAGGTTCCCAACATCGGTCTGATTCGGCTCGCTGTCTGATTCGGCGGG 300
QY 301 TCACCCGTTCCGTTTCATCGAGACGCGCTGACCGAGCGCTGACCGAGGTCGAGCGGTGTCA 360
Db 301 TCACCCGTTCCGTTTCATCGAGACGCGCTGACCGAGCGCTGACCGAGGTCGAGCGGTGTCA 360
QY 361 ACAGATCCACTACCTGACCGCGAGAGGAGACCGCACGTCGTCGTCGTCGTCGTCGTCGTC 420
Db 361 ACAGATCCACTACCTGACCGCGAGAGGAGACCGCACGTCGTCGTCGTCGTCGTCGTCGTC 420
QY 421 CGCCGATCGACGCAAGGCGCGGTTCCGCGAGCGCGGTCGTCGTCGTCGTCGTCGTCGTCGTC 480
Db 421 CGCCGATCGACGCAAGGCGCGGTTCCGCGAGCGCGGTCGTCGTCGTCGTCGTCGTCGTCGTC 480
QY 481 GCGAGTCCAGTACCTGTCGTCGAGTGGAGTACATGAGCGTGTGTGTGTGTGTGTGTGTGTGT 540
Db 481 GCGAGTCCAGTACCTGTCGTCGAGTGGAGTACATGAGCGTGTGTGTGTGTGTGTGTGTGTGT 540
QY 541 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 600
Db 541 TGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 600
QY 601 TGATGGCGCCCAACATGACGCGCGGCGGATCGACCGCGCGAGT 660
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Db 601 TGATGGGCGCCAAACATGCAGCGCCAGCGGTTCCGCTGGTGGCAGCGAGCGCGCTGG 660
Qy 661 TGGGACCCGGCATGAGTGTGGCGCGGCGATGCAGCGGCGACGT 705
Db 661 TGGGACCCGGCATGAGTGTGGCGCGGCGATGACGCGCGACGT 705

RESULT 15
US-09-285-306-10
; Sequence 10, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jory
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-10

Query Match 98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 3.7e-151;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

Qy 1 CCCAGACGTGGAGCGCATCACACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 1 CCCAGACGTGGAGCGCATCACACCGCAGACCCCTGATCAACATCCGTCCGTGCGTGGCGG 60

Qy 61 CGATCAAGGAGTCTTCGGCACCAGCAGCTGTCCAGTTTCATGACACGAAACACCCGC 120
Db 61 CGATCAAGGAGTCTTCGGCACCAGCAGCTGTCCAGTTTCATGACACGAAACACCCGC 120

Qy 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGCGCTGGCGCCCGGTGTCTGTCCCGGG 180
Db 121 TGTGGGGCTGACCCACAAGCGCCCTGTGCGCGCTGGCGCCCGGTGTCTGTCCCGGG 180

Qy 181 AGCGGGCCGGCTGGAGTTCGCGACGTGCACCCGTCCACTACCGCCGGATGTCGCCGA 240
Db 181 AGCGGGCCGGCTGGAGTTCGCGACGTGCACCCGTCCACTACCGCCGGATGTCGCCGA 240

Qy 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGGTGTATGCGCGG 300
Db 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGGTGTATGCGCGG 300

Qy 301 TCAACCCGTTCCGGTTTCATGAGACGCGGTACCGAAGGTGTGACACGCGGTGTCACCG 360
Db 301 TCAACCCGTTCCGGTTTCATGAGACGCGGTACCGAAGGTGTGACACGCGGTGTCACCG 360

Qy 361 ACGAGATCCACTACTGACCCCGCAGAGGAGACCGCACCGTGGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCCCGCAGAGGAGACCGCACCGTGGTGGCGAGGCCAACT 420

Qy 421 CGCCGATCGACAGAGGCGCGTTCGCGGAGCGCGGGTGTGTGTCGCCCGCAAGCGG 480
Db 421 CGCCGATCGACAGAGGCGCGTTCGCGGAGCGCGGGTGTGTGTCGCCCGCAAGCGG 480

Qy 481 GCGAGTCCAGTACGTGCCCTCGTCGAGGTGACTACATGACGCTGTCGCCCGCAGA 540
Db 481 GCGAGTCCAGTACGTGCCCTCGTCGAGGTGACTACATGACGCTGTCGCCCGCAGA 540

Qy 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGACCGTGC 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCACGACGACGACCGTGC 600
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Qy 601 TGATGGGCGCCAAACATGCAGCGCCAGCGGTTCCGCTGGTGGCAGCGAGCGCGCTGG 660
Db 601 TGATGGGCGCCAAACATGCAGCGCCAGCGGTTCCGCTGGTGGCAGCGAGCGCGCTGG 660
Qy 661 TGGGACCCGGCATGAGTGTGGCGCGGCGATGCAGCGGCGACGT 705
Db 661 TGGGACCCGGCATGAGTGTGGCGCGGCGATGACGCGCGACGT 705
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Search completed: August 20, 2004, 01:36:41
Job time : 409.972 secs

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OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 12:36:51 ; Search time 66.4446 Seconds
(without alignments)
5888.223 Million cell updates/sec

Title: US-09-285-306-8

Perfect score: 705

Sequence: 1 cccagcgagtgaggcgatc.....ggcgatcgagcgagcgact 705

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents NA:*

- 1: /cgm2_6/ptodata/2/ina/5A COMB.seq:*
- 2: /cgm2_6/ptodata/2/ina/5B COMB.seq:*
- 3: /cgm2_6/ptodata/2/ina/6A COMB.seq:*
- 4: /cgm2_6/ptodata/2/ina/6B COMB.seq:*
- 5: /cgm2_6/ptodata/2/ina/PTUS COMB.seq:*
- 6: /cgm2_6/ptodata/2/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	3	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-138
10	530.4	75.2	620	2	US-08-520-946-135
11	530.4	75.2	620	4	US-08-520-946-138
12	530.4	75.2	620	4	US-09-655-378A-135
13	530.4	75.2	620	4	US-09-655-378A-138
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
18	528.8	75.0	620	4	US-08-520-946-136
19	528.8	75.0	620	4	US-08-520-946-137
20	528.8	75.0	620	4	US-08-520-946-139
21	528.8	75.0	620	4	US-08-520-946-140
22	528.8	75.0	620	4	US-09-655-378A-136
23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	371.2	52.7	4074	4	US-09-252-991A-4737

28	371.2	52.7	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
29	337.2	47.8	4083	4	US-09-489-039A-42	Sequence 22, Appl
30	337.2	47.8	4206	4	US-09-489-039A-30	Sequence 30, Appl
31	293.4	41.6	432	2	US-08-313-185-59	Sequence 59, Appl
32	293.4	41.6	432	3	US-09-082-614A-59	Sequence 59, Appl
33	286.2	40.6	324	4	US-08-750-088A-36	Sequence 36, Appl
34	286.2	40.6	324	4	US-09-722-319-36	Sequence 36, Appl
35	265.2	37.6	2964	4	US-09-540-236-1097	Sequence 1097, Ap
36	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
37	265.2	37.6	31063	4	US-09-596-002-20	Sequence 20, Appl
38	255.6	36.3	319	4	US-08-750-088A-35	Sequence 35, Appl
39	255.6	36.3	319	4	US-09-722-319-35	Sequence 35, Appl
40	249.8	35.4	11935	4	US-09-634-238-401	Sequence 401, App
41	244.4	34.7	14672	4	US-08-961-527-111	Sequence 111, App
42	244.4	34.7	1830121	4	US-09-557-884-1	Sequence 1, Appli
43	244.4	34.7	1830121	4	US-09-643-990A-1	Sequence 1, Appli
44	241.2	34.2	4143	4	US-09-328-352-4006	Sequence 4006, Ap
45	226.4	32.1	329	4	US-08-750-088A-34	Sequence 34, Appl

ALIGNMENTS

RESULT 1

US-08-797-812-24
; Sequence 24, Application US/08797812
; Patent No. 6228575
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas A.
; APPLICANT: Mack, David
; APPLICANT: Chee, Mark S.
; APPLICANT: Berno, Anthony J.
; APPLICANT: Strayer, Lubert
; APPLICANT: Ghandour, Ghassan
; APPLICANT: Wang, Ching
; TITLE OF INVENTION: Chip-Based Species Identification and
; Phenotypic Characterization of Microorganisms
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/797,812
FILING DATE: 07-FEB-1997
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/017,765
FILING DATE: 15-MAY-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/629,031
FILING DATE: 08-APR-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/012,631
FILING DATE: 01-MAR-1996
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/011,339
FILING DATE: 08-FEB-1996
ATTORNEY/AGENT INFORMATION:
NAME: Fitts, Renee A.
REGISTRATION NUMBER: 35,136
REFERENCE/DOCKET NUMBER: 16528X-018550
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-326-2400
TELEFAX: 415-326-2422

; INFORMATION FOR SEQ ID NO: 24:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 706 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: cDNA

; US-08-797-812-24

Query Match 86.6%; Score 610.6; DB 3; Length 706;

Best Local Similarity 91.6%; Pred. No. 8.1e-112;

Matches 646; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

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Qy 1 CCAGAGCGTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTGGTGGCG 60
Db 2 CCAGAGCGTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTGGTGGCG 61
Qy 61 CGATCAAGAGATTCTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAAGAACCCCGC 120
Db 62 CGATCAAGAGATTCTTCGGCACCAGCAGCTGTAGCCAAATTCATGGACCAAGAACCCCGC 121
Qy 121 TGTGGGGGTACCCACAAGCGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCGG 180
Db 122 TGTGGGGGTGACCCACAAGCGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCGG 181
Qy 181 AGCGGCGCGGCTGGAGTCCGCGAGCTGCACCGTCCCACTACGCGCGGATGTGCCGA 240
Db 182 AGCGTCCGCGGCTGGAGTCCGCGAGCTGCACCGTCCCACTACGCGCGGATGTGCCGA 241
Qy 241 TCAGAGACCCCGAGGGTCCCAACATCGGCTCGCTGTGGCGCTGTGGCGCTGTGGCGG 300
Db 242 TCAGAACCCCTGAGGGGCCCAACATCGTCTGTATCGGCTCGCTGTGGCGCTGTGGCGG 301
Qy 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGTACCGCAAGTGTGTGACGCGTGTGTCACCG 360
Db 302 TCAACCCGTTTCGGGTTTCATCGAAACGCGTACCGCAAGTGTGTGACGCGTGTGTCACCG 361
Qy 361 ACCAGATCCACTACTGACCGCGAGCAGGAGGACCGCCACGTCGTTGGCGCAGGCCAACT 420
Db 362 ACCAGATCGTGTACTTACCGCGCAGCAGGAGGACCGCCACGTCGTTGGCGCAGGCCAACT 421
Qy 421 CGCGGATCGACGACAAAGGGCGGTTTCGCGGAGGCGCGGTCGTCGTCGCGCAAGCGCG 480
Db 422 CGCGGATCGATCGGACGCGTTCGTTCTGTCGAGCGCGCGTCTGTCGCGCAAGCGCG 481
Qy 481 GCAGGTGAGTACGTGCGCTCTGTCGAGTGAATACATGAGAGTGTGTCGCGCGCGCAGA 540
Db 482 GCAGGTGAGTACGTGCGCTCTGTCGAGTGAATACATGAGAGTGTGTCGCGCGCGCAGA 541
Qy 541 TGTGTGCGTGGCCACCGCGATGATCCGTTCTTCGAGCAGCAGCAGCCAAACGTCGCC 600
Db 542 TGTGTGCGTGGCCACCGCGATGATCCGTTCTTCGAGCAGCAGCAGCCAAACGTCGCC 601
Qy 601 TGATGGCGCCAAATGACGCGCAGCGGTTCCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660
Db 602 TCATGGGGCAAAATGACGCGCAGCGGTTCCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 661
Qy 661 TGGGCAACCGCATGGAGCTGCGCGCGCGATGACCGCGCGAGCT 705
Db 662 TGGGCAACCGCATGGAGCTGCGCGCGCGATGACCGCGCGAGCT 706
```

RESULT 2

US-09-103-840A-2

; Sequence 2, Application US/09103840A

; Patent No. 6294328

; GENERAL INFORMATION:

; APPLICANT: FLEISCHMAN, Robert D.

; APPLICANT: WHITE, Owen R.

; APPLICANT: FRASER, Claire M.

; APPLICANT: FRASER, John C.

; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM

; TITLE OF INVENTION: TUBERCULOSIS

; FILE REFERENCE: 24366-20007.00

; CURRENT APPLICATION NUMBER: US/09/103,840A

; CURRENT FILING DATE: 1998-06-24

; NUMBER OF SEQ ID NOS: 2

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 2

; LENGTH: 4403765

; TYPE: DNA

; ORGANISM: Mycobacterium tuberculosis

; FEATURE:

; OTHER INFORMATION: CDC 1551

; OTHER INFORMATION: "n" bases at various positions throughout the sequence

; OTHER INFORMATION: represent a, t, c or g

US-09-103-840A-2

Query Match 85.5%; Score 603; DB 3; Length 4403765;

Best Local Similarity 91.4%; Pred. No. 3.9e-110;

Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

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Qy 1 CCAGAGCGTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTGGTGGCG 60
Db 762963 CCAGAGCGTGGAGCGATCACACCGCAGACCCCTGATCAACATCCGTCAGTGGTGGCG 763022
Qy 61 CGATCAAGAGATTCTTCGGCACCAGCAGCTGTCCAGTTTCATGGACCAAGAACCCCGC 120
Db 763023 CGATCAAGAGATTCTTCGGCACCAGCAGCTGTAGCCAAATTCATGGACCAAGAACCCCGC 763082
Qy 121 TGTGGGGGTACCCACAAGCGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCGG 180
Db 763083 TGTGGGGGTGACCCACAAGCGCGCTGTGGCGCTGTGGCGCTGTGGCGCTGTGGCGG 763142
Qy 181 AGCGGCGCGGCTGGAGTCCGCGAGCTGCACCGTCCCACTACGCGCGGATGTGCCGA 240
Db 763143 AGCGTCCGCGGCTGGAGTCCGCGAGCTGCACCGTCCCACTACGCGCGGATGTGCCGA 763202
Qy 241 TCAGAGACCCCGAGGGTCCCAACATCGGCTCGCTGTGGCGCTGTGGCGCTGTGGCGG 300
Db 763203 TCAGAACCCCTGAGGGGCCCAACATCGTCTGTATCGGCTCGCTGTGGCGCTGTGGCGG 763262
Qy 301 TCAACCCGTTTCGGGTTTCATCGAGACGCGTACCGCAAGTGTGTGACGCGTGTGTCACCG 360
Db 763263 TCAACCCGTTTCGGGTTTCATCGAAACGCGTACCGCAAGTGTGTGACGCGTGTGTCACCG 763322
Qy 361 ACCAGATCCACTACTGACCGCGAGCAGGAGGACCGCCACGTCGTTGGCGCAGGCCAACT 420
Db 763323 ACCAGATCGTGTACTTACCGCGCAGCAGGAGGACCGCCACGTCGTTGGCGCAGGCCAACT 763382
Qy 421 CGCGGATCGACGACAAAGGGCGGTTTCGCGGAGGCGCGGTCGTCGTCGCGCAAGCGCG 480
Db 763383 CGCGGATCGATCGGACGCGTTCGTTCTGTCGAGCGCGCGTCTGTCGCGCAAGCGCG 763442
Qy 481 GCAGGTGAGTACGTGCGCTCTGTCGAGTGAATACATGAGAGTGTGTCGCGCGCGCAGA 540
Db 763443 GCAGGTGAGTACGTGCGCTCTGTCGAGTGAATACATGAGAGTGTGTCGCGCGCGCAGA 763502
Qy 541 TGTGTGCGTGGCCACCGCGATGATCCGTTCTTCGAGCAGCAGCAGCCAAACGTCGCC 600
Db 763503 TGTGTGCGTGGCCACCGCGATGATCCGTTCTTCGAGCAGCAGCAGCCAAACGTCGCC 763562
Qy 601 TGATGGCGCCAAATGACGCGCAGCGGTTCCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 660
Db 763563 TCATGGGGCAAAATGACGCGCAGCGGTTCCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 763622
Qy 661 TGGGCAACCGCATGGAGCTGCGCGCGCGATGACCGCGG 699
Db 763623 TGGGCAACCGCATGGAGCTGCGCGCGCGATGACCGCGG 763661
```

RESULT 3

US-09-103-840A-1

; Sequence 1, Application US/09103840A

; Patent No. 6294328

; GENERAL INFORMATION:

APPLICANT: FLEISCHMAN, Robert D.
APPLICANT: WHITE, Owen R.
APPLICANT: FRASER, Claire M.
APPLICANT: VENTER, John C.
TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
TUBERCULOSIS
FILE REFERENCE: 24366-20007.00
CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT FILING DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2
SOFTWARE: Patent In Ver. 2.1
SEQ ID NO 1
LENGTH: 4411529
TYPE: DNA
ORGANISM: Mycobacterium tuberculosis
OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match 85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.4%; Pred. No. 3.9e-110;
Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGCGGATCAACCGCAGACCTGATCAATCGTCCAGTCGTGGCGG 60
DB 761003 CCCAGGAGCTGGAGCGGATCAACCGCAGACCTGATCAATCGTCCAGTCGTGGCGG 761062
QY 61 CGATCAAGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTCATGACCAACACCCGC 120
DB 761063 CGATCAAGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTCATGACCAACACCCGC 761122
QY 121 TGTGGGGCTCACCACACAGCGCGCTGTGGCGCTGGCGCGGTGCTGTCCCGG 180
DB 761123 TGTGGGGCTCACCACACAGCGCGCTGTGGCGCTGGCGCGGTGCTGTCCCGG 761182
QY 181 AGCGGGCGGGCTGGAGTCCGCGACGTGCAACCCGTCCTACCGCGGATGCCCCGA 240
DB 761183 AGCGTCCGGCTGGAGTCCGCGACGTGCAACCCGTCCTACCGCGGATGCCCCGA 761242
QY 241 TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGTTCGTGTCGTGATGCGCGG 300
DB 761243 TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGTTCGTGTCGTGATGCGCGG 761302
QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGAAGGTGTGACGGGTGTGTCACG 360
DB 761303 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGAAGGTGTGACGGGTGTGTCACG 761362
QY 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCACGTGTGGCGAGGCCAACT 420
DB 761363 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCACGTGTGGCGAGGCCAACT 761422
QY 421 CGCGGATCGACGACAAAGGCGCGGTTCGCGAGGCGCGCGGTGCTGTCCCGCCAAAGCGG 480
DB 761423 CGCGGATCGACGACAAAGGCGCGGTTCGCGAGGCGCGCGGTGCTGTCCCGCCAAAGCGG 761482
QY 481 GCGAGGTGAGTACGTGCTCCCTGTCGAGGTGAGTACATGACGTGTCGCGCGCCAGA 540
DB 761483 GCGAGGTGAGTACGTGCTCCCTGTCGAGGTGAGTACATGACGTGTCGCGCGCCAGA 761542
QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCCGTCGCC 600
DB 761543 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCCGTCGCC 761602
QY 601 TGATGGGCGCAACATGACGCGCCAGGCGGTTCGCTGCTGTGGCGAGCGCGCGCTGG 660
DB 761603 TCATGGGCGCAACATGACGCGCCAGGCGGTTCGCTGCTGTGGCGAGCGCGCGCTGG 761662
QY 661 TGGGACCGGCATGAGTGTGCGCGCGGCGATGACGCGG 699
DB 761663 TGGGACCGGCATGAGTGTGCGCGCGGCGATGACGCGG 761701

RESULT 4
US-08-313-185-57

; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amelio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-313-185-57

Query Match 79.2%; Score 558.2; DB 2; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.7e-101;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGCGGATCAACCGCAGACCTGATCAATCGTCCAGTCGTGGCGG 60
DB 1124 CCCAGGAGCTGGAGCGGATCAACCGCAGACCTGATCAATCGTCCAGTCGTGGCGG 1183
QY 61 CGATCAAGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTCATGACCAACACCCGC 120
DB 1184 CTATCAAGAGTCTTTCGGCACCAGCCAGCTGTCCAGTTCATGATCAGAACACCCCTC 1243
QY 121 TGTGGGGCTCACCACAAAGCGCGCGCTGTGGCGCTGGCGCGGTGCTGTCCCGG 180
DB 1244 TGTGGGGCTCACCACAAAGCGCGCGCTGTGGCGCTGGCGCGGTGCTGTCCCGG 1303
QY 181 AGCGGGCGGGCTGGAGTTCGCGACGTGCGACCGCTCCACTAGCGCGGATGTCGCCGA 240
DB 1304 AGCGTCCGGCTAGAGTTCGCGACGTGCGACCGTCCACTAGCGCGGATGTCGCCGA 1363
QY 241 TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGGTTCGTGTCGTGATGCGCGG 300
DB 1364 TCGAGACTCCGAGGGCGCGCAACATAGGTCTGATCGGTTCATTTGTCGTACCGCGCGG 1423
QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGTGTGACCGGTGTCACCG 360
DB 1424 TCAACCCGTTCCGGTTCATCGAGACCGCGTACCGCAAGTGTGACCGGTGTCACCG 1483

Db 701 ACAGATCGTGTACCTGACCGCGACGAGGAGGACGCCACAGTGTGGTGGACAGGCCAATT 760
Qy 421 CGCGATCGACGACAAAGGCGCGTTCGCGAGGCGCGGCTGCTGGTCCGCGCAAGCGG 480
Db 761 CGCGATCGATGCGGACGCGTTCGTCGAGCGCGCGTCTGCTCGCGCGCAAGCGG 820
Qy 481 GCAGGTCGAGTACGTCGCCCTCGTCGAGGTGGACTACATGGAGTGTGCGCGCGCCAGA 540
Db 821 GCAGGTCGAGTACGTCGCCCTCGTCGAGGTGGACTACATGGAGTGTGCGCGCGCCAGA 880
Qy 541 TGTGTCGTCGCGACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCAACCGTCCCG 600
Db 881 TGTGTCGTCGCGACCGCGATGATCCCGTTCCTCGAGCAGCAGCGCAACCGTCCCG 940
Qy 601 TGATGGCGCAACATGACGCGCGCGG 630
Db 941 TCATGGGGGCAACATGACGCGCGCGG 970

RESULT 8

US-08-757-653-135
; Sequence 135, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-135

Query Match 75.2%; Score 530.4; DB 2; Length 620;
Best Local Similarity 91.0%; Pred. No. 4.6e-96;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;
Qy 36 ATCAACATCCGTCGATCGTGGCGCGATCAAGAGTTCTTCGCAACGACCGACTGTCC 95
Db 1 ATCAACATCCGCGCGTGTGCGCGATCAAGAGTTCTTCGCAACGACCGACTGTGAGC 60
Qy 96 CAGTTTCATGGACCAAGAAACCCGTCGCGGCTCACCAACGCGCGCTGTCCGCG 155
Db 61 CAATTTCATGGACCAAGAAACCCGTCGCGGTTGACCCCAAGCGCGCGACTGTCCGCG 120

Qy 156 CTGGGCGCGGTGTGTCTCCCGGAGCGCGCGCGGCTGGAGTCCCGCGACGTGCACCCG 215
Db 121 CTGGGCGCGCGGTGTGTCTCCCGGAGCGCGCGCGGCTGGAGTCCCGCGACGTGCACCCG 180
Qy 216 TCCACTACCGCGCGGATGTCCCGATCGAGACCGCGAGGTTCCAAACATCGGTTCTGATC 275
Db 181 TCGCACTACCGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTTCTGATC 240
Qy 276 GGCTCGTGTCTGCTGATGCGCGGTTCAACCCGTTCCGGTTTCATCGAGACGCCGTACCGC 335
Db 241 GGCTCGTGTCTGCTGATGCGCGGTTCAACCCGTTCCGGTTTCATCGAAACGCCGTACCGC 300
Qy 336 AAGTGTGTCTGACGCGGTGTCAACCGAGATCCACTACCTGACCGCGCGACGAGGAGAC 395
Db 301 AAGTGTGTCTGACGCGGTGTGAGGACGAGATCGTGTACCTGACCGCGCGAGGAGAC 360
Qy 396 CGCCACGTGTGCGCAGGCGCAACTCGCCGATCGACACAAAGGCGCGGTTGCGCGAGGCC 455
Db 361 CGCCACGTGTGCGCAGGCGCAATTCGCCGATCGATCGGACCGTCTGTCGAGCGG 420
Qy 456 CGGTGTGTCTGCGCGCGCAAGGCGGAGGTTCGAGTACGTGCCCTCGTCGAGGTGAC 515
Db 421 CGGTGTGTCTGCGCGCGCAAGGCGGAGGTTCGAGTACGTGCCCTCGTCGAGGTGAC 480
Qy 516 TACATGAGCGTGTGCGCGCGCGAGATGTTGCGGTGCGCACCGCGATGATCCCGTTCTC 575
Db 481 TACATGAGCGTGTGCGCGCGCGAGATGTTGCGGTGCGCACCGCGATGATTCCTCTG 540
Qy 576 GAGCAGCAGCAGCAGCAGCGTGCCTGATGGGCGCCAAACATGAGCGCGCGGTTCCG 635
Db 541 GAGCAGCAGCAGCAGCAGCGTGCCTCATGGGGGCAAAACATGACGCGCGCGTTCGCG 600
Qy 636 CTGTGCGCAGCGAGGCGCC 655
Db 601 CTGTGCGTAGCGAGGCGCC 620

RESULT 9

US-08-757-653-138/c
; Sequence 138, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:

Db 601 CTGGTCGTAGCGAGGCCCC 620

RESULT 11

US-08-520-946-138/c

; Sequence 138, Application US/08520946

; Patent No. 6372424

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; APPLICANT: LYAMICHEV, VICTOR I.

; APPLICANT: OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; TITLE OF INVENTION: PATHOGENS

; NUMBER OF SEQUENCES: 160

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/520,946

; FILING DATE:

; CLASSIFICATION: 435

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

US-08-520-946-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 4.6e-96;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCAGTCGTGGCGCGATCAAGAGTTCTTCGGCACCGAGCTGTC 95

Db 620 ATCAACATCCGCGCGGTGGTCGCCGATCAAGAGTTCTTCGGCACCGAGCTGAGC 561

Qy 96 CAGTTCATGACACAGAACACCCGCTGTGGGGGTCAACACAGCGCGCTTCGGCG 155

Db 560 CAATTCATGACACAGAACACCCGCTGTGGGGTTGACCAACAGCGCGACTGTGGCG 501

Qy 156 CTGGGCCCGGTGTGTGTCTCCCGGAGCGGCGCTGGAGTTCGGAGCTGCACCG 215

Db 500 CTGGGCCCGCGGTGTGTGTCTCCCGGAGCGGCGCTGGAGTTCGGAGCTGCACCG 441

Qy 216 TCCCACTACGCGCGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 275

Db 440 TCGCACTACGCGCGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 381

Qy 276 GGCTCGCTGTGGTGTATGCGCGGTCAACCCGTTTCGGGTTTCATCGAGCGCCGACCG 335

Db 380 GGCTCGCTGTGGTGTATGCGCGGTCAACCCGTTTCGGGTTTCATCGAAGCGCGTACCG 321

Qy 336 AAGTGTGTGACGCGCGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 395

Db 320 AAGTGTGTGACGCGCGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 261

Qy 396 CGCACGTGTGTGGCGAGGCCCACTCGCCGATCGAGACAAAGGCGCGTTTCGGAGGCC 455

Db 260 CGCACGTGTGTGGCGAGGCCCAATTCGCCGATCGATCGGACGTCCTTCGTGAGCCG 201

Qy 456 CGGT 515

Db 200 CGGT 141

Qy 516 TACATGAGCGT 575

Db 140 TACATGAGCGT 81

Qy 576 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGC 635

Db 80 GAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGC 21

Qy 636 CTGGTCGCGAGCGAGGCC 655

Db 20 CTGGTCGCGAGCGAGGCC 1

RESULT 12

US-09-655-378A-135

; Sequence 135, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; APPLICANT: LYAMICHEV, VICTOR I.

; APPLICANT: OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; TITLE OF INVENTION: PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 135:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 135:

US-09-655-378A-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 4.6e-96;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCAGTCGTGGCGCGATCAAGAGTTCTTCGGCACCGAGCTGTC 95

Db 1 ATCAACATCCGCGCGGTGGTCGCCGATCAAGAGTTCTTCGGCACCGAGCTGAGC 60

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QY 96 CAGTTCATGGACCAAGACCAACCGCTGTGCGGGCTCACCACAAAGCGCGCTGTGCGGG 155
Db 61 CAATTCATGGACCAAGACCAACCGCTGTGCGGGTTGACCCAAAGCGCGCTGTGCGGG 120
QY 156 CTGGCCCGGGTGTCTGTCTCCCGGAGGCGGCGGGCTGGAGGTCCGGACGTGCACCGG 215
Db 121 CTGGGGCCGGGGTCTGTCTGACGTGAGCGTGCAGGGCTGGAGTCCGGACGTGCACCGG 180
QY 216 TCCCACTACGGCCGATGTGCGCGATCGAGACCCCGAGGGTCCAAACATCGGTCTGATC 275
Db 181 TCGCACTACGGCCGATGTGCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGCTCGCTGTGCTGTGTCGCGGGGTCAACCGTTGCGGGTTTCATCGAGCGCGTACCGC 335
Db 241 GGCTCGCTGTGCTGTGTCGCGGGGTCAACCGTTGCGGGTTTCATCGAAACCGCGTACCGC 300
QY 336 AAGGTGTGTCGACGGCGTGTCTCACCACAGATCCACTACTGACCGCGACGAGGAGGAC 395
Db 301 AAGGTGTGTCGACGGCGTGTCTAGCGACGAGATCGTGTACCTGACCGCGACGAGGAGGAC 360
QY 396 CGCCACGTGTGCGCGAGCGCAACTCGCGCATCGACGACAAAGGGCGGTTCGCGGAGGCC 455
Db 361 CGCCACGTGTGCGCGAGCGCAACTCGCGCATCGATCGAGCGGTCTGCTCGAGCGG 420
QY 456 CGGGTGTGTCGCGCGAGCGCAACTCGCGCATCGAGTCCGAGTCCCTCGTCGAGTGGAC 515
Db 421 CGGGTGTGTCGCGCGAGCGCAACTCGCGCATCGAGTCCGAGTCCCTCGTCTGAGTGGAC 480
QY 516 TACATGACGTGTGTCGCGCGAGCGCAACTCGCGCATCGAGTCCGAGTCCCTCGTCTC 575
Db 481 TACATGACGTGTGTCGCGCGAGCGCAACTCGCGCATCGAGTCCGAGTCCCTCGTCTC 540
QY 576 GAGCAGCAGCGCGCAACTCGCGCATCGAGTCCGAGTCCGAGTCCCTCGTCTC 635
Db 541 GAGCAGCAGCGCGCAACTCGCGCATCGAGTCCGAGTCCGAGTCCCTCGTCTC 600
QY 636 CTGGTGGCAGCGAGGCGCC 655
Db 601 CTGGTGGCAGCGAGGCGCC 620

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RESULT 13

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US-09-655-378A-138/c
; Sequence 138, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; MEDIUM TYPE: Floppy disk
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655,378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756

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TELECOMMUNICATION INFORMATION:

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; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 138:
US-09-655-378A-138

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Query Match 75.2%; Score 530.4; DB 4; Length 620;
Best Local Similarity 91.0%; Pred. No. 4.6e-96;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

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QY 36 ATCAACATCCCGTCCAGTCTGTGCGCGCATCAAGGAGTTCCTCGGCACGACGAGTGTCC 95
Db 620 ATCAACATCCCGTCCAGTCTGTGCGCGCATCAAGGAGTTCCTCGGCACGACGAGTGTCC 561
QY 96 CAGTTTCATGACCAAGACCAACCCCGTGTGCGGGGTTCACCCCAAGCGCGCTGTGCGCG 155
Db 560 CAATTCATGACCAAGACCAACCCCGTGTGCGGGTTGACCCCAAGCGCGCTGTGCGCG 501
QY 156 CTGGCCCGGGTGTCTGTCTCCCGGAGCGGGCTGGAGTCCGCGACGTGCACCGG 215
Db 500 CTGGGGCCCGGGTCTGTCTACGTGAGCGTGTGCGGGTGGAGTCCGCGACGTGCACCGG 441
QY 216 TCCCACTACGCGCGGATGTGCGCGATCCGAGACCCGCGAGGGTCCCAACATCGGTCTGATC 275
Db 440 TCGCACTACGCGCGGATGTGCGCGATCCGAGACCCCTGAGGGGCCCAACATCGGTCTGATC 381
QY 276 GGCTCGCTGTGCTGTGATGCGCGGGTCAACCCGTTTCGGGTTTCATCGAGACGCGCTACCGC 335
Db 380 GGCTCGCTGTGCTGTGATGCGCGGGTCAACCCGTTTCGGGTTTCATCGAAACGCGCTACCGC 321
QY 336 AAGTGTGTCGACGGCGTGTCAACCGACGAGATCCACTACCTGACCGCGACGAGGAGGAC 395
Db 320 AAGTGTGTCGACGGCGTGTGATGAGCGACGAGATCGTGTACCTGACCGCGACGAGGAGGAC 261
QY 396 CGCCACGTGTGCGCGAGCGCAACTCGCGCATCGAGACCAAGGGCGGGTTCGCGGAGGCC 455
Db 260 CGCCACGTGTGCGCGAGCGCAACTCGCGCATCGAGTCCGAGCGCGGTTCGTCGAGCGG 201
QY 456 CGGGTGTGTCGCGCGCGCAAGCGCGGAGGTCCAGTACGTGCGCTCCGAGGTGGAC 515
Db 200 CGGGTGTGTCGCGCGCGCAAGCGCGGAGGTGGAGTACGTGCGCTCCGTCGAGTGGAC 141
QY 516 TACATGACGTGTGTCGCGCGCATGATGTCGGTGGCCACGCGCATGATCCGTTCTC 575
Db 140 TACATGACGTGTGTCGCGCGCATGATGTCGGTGGCCACGCGCATGATCCGTTCTC 81
QY 576 GAGCAGCAGCGCGCAACCGTGCCTGATGGCGCCACATCGAGCGCGAGCGGTTCG 635
Db 80 GAGCAGCAGCGCGCAACCGTGCCTGATGGCGCCACATCGAGCGCGAGCGGTTCG 61
QY 636 CTGGTGGCGAGCGAGGCGCC 655
Db 20 CTGGTGGCGAGCGAGGCGCC 1

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RESULT 14

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US-08-757-653-136
; Sequence 136, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; THERMOSTABLE FEN-1 ENDONUCLEASES
; NUMBER OF SEQUENCES: 190

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;
;
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 136:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-136

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 9.4e-96;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGCGCGGCGATCAAGAGGTTCTTCGGCACACGACGCTGTC 95
DB 1 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGTTCTTCGGCACACGACGCTGAGC 60
QY 96 CAGTTATGACCAAGAACACCCGCTGTCCGGGCTACACCAAGCCGCGCTGTCCGGC 155
DB 61 CAATTATGACCAAGAACACCCGCTGTCCGGGTTGACCCACCAAGCCGCGCTGTCCGC 120
QY 156 CTGGGCGCGGTGTCTGTCGCGGAGCGCGGCTGAGGTTCCGGACGTCACCCG 215
DB 121 CTGGGCGCGGTGTCTGTCAGTGAGCGTGTCGCGGCTGAGGTTCCGGACGTCACCCG 180
QY 216 TCCACTACGCGCGGATGTGCCGATCGAGACCCCGGAGGTTCCCAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGCTCGGTGTGTTGATGCGCGGTCAACCCGTTCCGGTTTCATCGAGACCGGTTCCG 335

;
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 137:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-137

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 9.4e-96;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGCGCGGCGATCAAGAGGTTCTTCGGCACACGACGCTGTC 95
DB 1 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGTTCTTCGGCACACGACGCTGAGC 60
QY 96 CAGTTATGACCAAGAACACCCGCTGTCCGGGCTACACCAAGCCGCGCTGTCCGGC 155
DB 61 CAATTATGACCAAGAACACCCGCTGTCCGGGTTGACCCACCAAGCCGCGCTGTCCGC 120
QY 156 CTGGGCGCGGTGTCTGTCGCGGAGCGCGGCTGAGGTTCCGGACGTCACCCG 215
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QY 276 GGCTCGGTGTGTTGATGCGCGGTCAACCCGTTCCGGTTTCATCGAGACCGGTTCCG 335

;
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-138

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 9.4e-96;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTCGCGCGGCGATCAAGAGGTTCTTCGGCACACGACGCTGTC 95
DB 1 ATCAACATCCGCGCGGTGTCGCGCGATCAAGAGTTCTTCGGCACACGACGCTGAGC 60
QY 96 CAGTTATGACCAAGAACACCCGCTGTCCGGGCTACACCAAGCCGCGCTGTCCGGC 155
DB 61 CAATTATGACCAAGAACACCCGCTGTCCGGGTTGACCTACCAAGCCGCGCTGTCCGC 120
QY 156 CTGGGCGCGGTGTCTGTCGCGGAGCGCGGCTGAGGTTCCGGACGTCACCCG 215
DB 121 CTGGGCGCGGTGTCTGTCAGTGAGCGTGTCGCGGCTGAGGTTCCGGACGTCACCCG 180
QY 216 TCCACTACGCGCGGATGTGCCGATCGAGACCCCGGAGGTTCCCAACATCGGTCTGATC 275
DB 181 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GGCTCGGTGTGTTGATGCGCGGTCAACCCGTTCCGGTTTCATCGAGACCGGTTCCG 335
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Db 241 GGCTCGTGTGGGTACGGCGGGTCAACCGTTTCGGGTTTCATCGAAACGCCGTACCGC 300
QY 336 AAGGTGGTTCGACGGCGTGGTCAACCGAGATCCACTACCTGACCGCCGACGAGAGGAC 395
Db 301 AAGGTGGTTCGACGGCGTGGTTAGCCGACGAGATCGTGTACTCTGACCGCCGACGAGAGGAC 360
QY 396 CGCCACGTGGTGGCGCAGGCCAACTCGCCGATCGAGACGACAAGGGCCGGTTCGCGAGGCC 455
Db 361 CGCCACGTGGTGGCACAGGCCAATTCGCCGATCGATGCGGACGGTCGCTTCGTCGAGCCG 420
QY 456 CGGGTGTCTGGTCCGCCGAAGCGGGCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGAC 515
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QY 516 TACATGGACGTGTCCGCCGCCGAGATGGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTC 575
Db 481 TACATGGACGTGTCCGCCGCCGAGATGGTGTCTGGTGGCCACCGCGATGATCCCTTCCTG 540
QY 576 GAGCAGCAGCAGCCCAACCGTCCCTGATGGCGCCCAACATGACGCGCCAGCGGGTTCGG 635
Db 541 GAGCAGCAGCAGCCCAACCGTCCCTGATGGCGCCCAACATGAGCGCCAGCGGGTTCGG 600
QY 636 CTGTGCGCAGCGAGGCC 655
Db 601 CTGTGCGTAGCGAGGCC 620

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

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(without alignments)
8488.468 Million cell updates/sec

Title: US-09-285-306-8

Perfect score: 705

Sequence: 1 cccaggacgtggaggcgtc.....ggcgatcgacgcggcgacgt 705

Scoring table: IDENTITY NUC

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Searched: 3228839 seqs, 2456066551 residues

Total number of hits satisfying chosen parameters: 6457678

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

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- 5: /cgn2_6/ptodata/1/pubna/US07_NEW_PUB.seq.*
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- 13: /cgn2_6/ptodata/1/pubna/US09_NEW_PUB.seq.*
- 14: /cgn2_6/ptodata/1/pubna/US09_PUBCOMB.seq.*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	705	100.0	705	US-09-285-306-5	Sequence 5, Appli
3	705	100.0	705	US-09-285-306-6	Sequence 6, Appli
4	705	100.0	705	US-09-285-306-7	Sequence 7, Appli
5	705	100.0	705	US-09-285-306-8	Sequence 8, Appli
6	705	100.0	705	US-09-285-306-9	Sequence 9, Appli
7	705	100.0	705	US-09-285-306-12	Sequence 12, Appli
8	705	100.0	705	US-09-285-306-13	Sequence 13, Appli
9	705	100.0	705	US-09-285-306-14	Sequence 14, Appli
10	705	100.0	705	US-09-285-306-16	Sequence 16, Appli
11	705	100.0	705	US-09-285-306-17	Sequence 17, Appli
12	703.4	99.8	705	US-09-285-306-24	Sequence 24, Appli
13	695	98.6	705	US-09-285-306-3	Sequence 3, Appli
14	693.4	98.4	705	US-09-285-306-11	Sequence 11, Appli

15	691	98.0	705	9	US-09-285-306-10	Sequence 10, Appl
16	691	98.0	3444	13	US-10-282-122A-25737	Sequence 25737, A
17	687	97.4	687	9	US-09-285-306-18	Sequence 18, Appl
18	687	97.4	687	9	US-09-285-306-19	Sequence 19, Appl
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22	687	97.4	687	9	US-09-285-306-23	Sequence 23, Appl
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25	660.2	93.6	705	9	US-09-285-306-143	Sequence 143, App
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33	653.8	92.7	705	9	US-09-285-306-86	Sequence 86, Appl
34	653.8	92.7	705	9	US-09-285-306-93	Sequence 93, Appl
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39	652.2	92.5	705	9	US-09-285-306-91	Sequence 91, Appl
40	652.2	92.5	705	9	US-09-285-306-181	Sequence 181, App
41	642.2	91.1	687	9	US-09-285-306-146	Sequence 146, App
42	642.2	91.1	687	9	US-09-285-306-148	Sequence 148, App
43	637.4	90.4	687	9	US-09-285-306-100	Sequence 100, App
44	635.8	90.2	687	9	US-09-285-306-99	Sequence 99, Appl
45	635.8	90.2	687	9	US-09-285-306-145	Sequence 145, App

ALIGNMENTS

RESULT 1

US-09-285-306-4
; Sequence 4, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; US-09-285-306-4

Query Match	100.0%;	Score 705;	DB 9;	Length 705;
Best Local Similarity	100.0%;	Pred. No. 2.1e-154;		
Matches 705;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
QY	1	CCCAGGAGTGGAGCGGATCATCACCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60		
Db	1	CCCAGGAGTGGAGCGGATCATCACCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60		
QY	61	CGATCAAGGAGTTCCTCGGACCCAGCCAGCTGCCAGTTCATGCACGACACACCCGC 120		
Db	61	CGATCAAGGAGTTCCTCGGACCCAGCCAGCTGCCAGTTCATGCACGACACACCCGC 120		
QY	121	TGTCGGGCTCACCCACAAAGCCGCTGTGGCGCTGGCCCGGTGGTCTGTCCCGG 180		
Db	121	TGTCGGGCTCACCCACAAAGCCGCTGTGGCGCTGGCCCGGTGGTCTGTCCCGG 180		

```
QY 181 AGCGGGCGGCTGAGGTCCGCGACGTGACCCGTCCTCCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGGCGGCTGAGGTCCGCGACGTGACCCGTCCTCCACTACGCGCGGATGTGCCGA 240
QY 241 TCAGAGACCCCGGAGGTCCCAACATCGGTCTGTATCGGCTCGCTGTCTGATGTGCGCGGG 300
Db 241 TCAGAGACCCCGGAGGTCCCAACATCGGTCTGTATCGGCTCGCTGTCTGATGTGCGCGGG 300
QY 301 TCAACCCGTTCCGCTTCATCGAGACGCCGTACCGCAAGGTGGTTCAGCGGCTGTGTACCG 360
Db 301 TCAACCCGTTCCGCTTCATCGAGACGCCGTACCGCAAGGTGGTTCAGCGGCTGTGTACCG 360
QY 361 ACCAGATCCACTACCTACCGCGCAGAGGAGGACCCGACGTGGTGGCGCAGCCAACT 420
Db 361 ACCAGATCCACTACCTACCGCGCAGAGGAGGACCCGACGTGGTGGCGCAGCCAACT 420
QY 421 CGCGGATCCAGACGACAAAGGCGCGTTCGCGAGGCGCGGGTGTCTGGTCCGCGCAAGCGG 480
Db 421 CGCGGATCCAGACGACAAAGGCGCGTTCGCGAGGCGCGGGTGTCTGGTCCGCGCAAGCGG 480
QY 481 GCAGGTTCGAGTACGTCCCTCTGTTCGAGGTGGACTACATGAGACGTTCGCGCGCCAGA 540
Db 481 GCAGGTTCGAGTACGTCCCTCTGTTCGAGGTGGACTACATGAGACGTTCGCGCGCCAGA 540
QY 541 TGCTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGACGACGACGCCAACCGTGCC 600
Db 541 TGCTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGACGACGACGCCAACCGTGCC 600
QY 601 TGATGGCGCGCAACATGACGCGCAGCGGTTCGCTGTGTCGAGAGCGCGCGCTGG 660
Db 601 TGATGGCGCGCAACATGACGCGCAGCGGTTCGCTGTGTCGAGAGCGCGCGCTGG 660
QY 661 TGGGCACCGCATGGAGCTCGCGCGCGCATGACGCGCGGACGT 705
Db 661 TGGGCACCGCATGGAGCTCGCGCGCGCATGACGCGCGGACGT 705
```

RESULT 2

US-09-285-306-5

; Sequence 5, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Ginteras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 5

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-5

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2,1e-154;

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCAGGACGTGGAGCGATCACACCGCAGACCTGTATCAACATCCGTTCAGTCCGTGCGG 60

Db 1 CCAGGACGTGGAGCGATCACACCGCAGACCTGTATCAACATCCGTTCAGTCCGTGCGG 60

QY 61 CGATCAAGGAGTTCTTCGGACACGACGAGTGTCCAGTTTCATGGACCAACCCGC 120

Db 61 CGATCAAGGAGTTCTTCGGACACGACGAGTGTCCAGTTTCATGGACCAACCCGC 120

QY 121 TGTGGGGCTCACCCACAAGCGCGCTGTGCGGCTGGCGCGGTGGTCTGTCCCGGG 180

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Db 121 TGTGGGGCTCACCCACAAGCGCGCTGTGCGGCTGGCGCGGTGGTCTGTCCCGGG 180
QY 181 AGCGGGCGGCTGAGGTCCGCGACGTGACCCGTCCTCCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGGCGGCTGAGGTCCGCGACGTGACCCGTCCTCCACTACGCGCGGATGTGCCGA 240
QY 241 TCAGAGACCCCGGAGGTCCCAACATCGGTCTGTATCGGCTCGCTGTCTGATGTGCGCGGG 300
Db 241 TCAGAGACCCCGGAGGTCCCAACATCGGTCTGTATCGGCTCGCTGTCTGATGTGCGCGGG 300
QY 301 TCAACCCGTTCCGCTTCATCGAGACGCCGTACCGCAAGGTGGTTCAGCGGCTGTGTACCG 360
Db 301 TCAACCCGTTCCGCTTCATCGAGACGCCGTACCGCAAGGTGGTTCAGCGGCTGTGTACCG 360
QY 361 ACCAGATCCACTACCTACCGCGCAGAGGAGGACCCGACGTGGTGGCGCAGCCAACT 420
Db 361 ACCAGATCCACTACCTACCGCGCAGAGGAGGACCCGACGTGGTGGCGCAGCCAACT 420
QY 421 CGCGGATCCAGACGACAAAGGCGCGTTCGCGAGGCGCGGGTGTCTGGTCCGCGCAAGCGG 480
Db 421 CGCGGATCCAGACGACAAAGGCGCGTTCGCGAGGCGCGGGTGTCTGGTCCGCGCAAGCGG 480
QY 481 GCAGGTTCGAGTACGTCCCTCTGTTCGAGGTGGACTACATGAGACGTTCGCGCGCCAGA 540
Db 481 GCAGGTTCGAGTACGTCCCTCTGTTCGAGGTGGACTACATGAGACGTTCGCGCGCCAGA 540
QY 541 TGCTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGACGACGACGCCAACCGTGCC 600
Db 541 TGCTGTGCGTGGCCACCGCGATGATCCGTTCTCGAGACGACGACGCCAACCGTGCC 600
QY 601 TGATGGCGCGCAACATGACGCGCAGCGGTTCGCTGTGTCGAGAGCGCGCGCTGG 660
Db 601 TGATGGCGCGCAACATGACGCGCAGCGGTTCGCTGTGTCGAGAGCGCGCGCTGG 660
QY 661 TGGGCACCGCATGGAGCTCGCGCGCGCATGACGCGCGGACGT 705
Db 661 TGGGCACCGCATGGAGCTCGCGCGCGCATGACGCGCGGACGT 705
```

RESULT 3

US-09-285-306-6

; Sequence 6, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Ginteras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER APPLICATION NUMBER: US 60/080,616

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 6

; LENGTH: 705

; TYPE: DNA

; ORGANISM: Mycobacterium avium

US-09-285-306-6

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2,1e-154;

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCAGGACGTGGAGCGATCACACCGCAGACCTGTATCAACATCCGTTCAGTCCGTGCGG 60

Db 1 CCAGGACGTGGAGCGATCACACCGCAGACCTGTATCAACATCCGTTCAGTCCGTGCGG 60

QY 61 CGATCAAGGAGTTCTTCGGACACGACGAGTGTCCAGTTTCATGGACCAACCCGC 120

Db 61 CGATCAAGGAGTTCTTCGGACACGACGAGTGTCCAGTTTCATGGACCAACCCGC 120

QY 121 TGTGGGGCTCACCACAGCGCGCCCTGTTCGGCGCTGGGCCGGTGGTCTGTCCCGGG 180
 Db 121 TGTGGGGCTCACCACAGCGCGCCCTGTTCGGCGCTGGGCCGGTGGTCTGTCCCGGG 180
 QY 181 AGCGGGCGGGCTGGAGTCCGCGACGTGACACCGCTCCCACTACGCGCGGATGTGCCGA 240
 Db 181 AGCGGGCGGGCTGGAGTCCGCGACGTGACACCGCTCCCACTACGCGCGGATGTGCCGA 240
 QY 241 TCGAGACCCCGGAGGTCCCAACATCGTCTGATCGGCTCGCTGTCGCTGATGCGCGG 300
 Db 241 TCGAGACCCCGGAGGTCCCAACATCGTCTGATCGGCTCGCTGTCGCTGATGCGCGG 300
 QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGTGGTGCACGCGTGTCAACG 360
 Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGTGGTGCACGCGTGTCAACG 360
 QY 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCCACGTTGTCGCGAGGCCAACT 420
 Db 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCCACGTTGTCGCGAGGCCAACT 420
 QY 421 CGCGATCGACGACAAAGGCGCGGTTTCGCGAGGCGCGGTTGCTGTCGCGCGCAAGGCGG 480
 Db 421 CGCGATCGACGACAAAGGCGCGGTTTCGCGAGGCGCGGTTGCTGTCGCGCGCAAGGCGG 480
 QY 481 GCGAGTTCGAGTTCGCTCTCCGAGGTGGACTACATGACGCTGTGTCGCGCGCCAGA 540
 Db 481 GCGAGTTCGAGTTCGCTCTCCGAGGTGGACTACATGACGCTGTGTCGCGCGCCAGA 540
 QY 541 TGGTGTTCGTTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGCGCAACCGTGCCC 600
 Db 541 TGGTGTTCGTTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGCGCAACCGTGCCC 600
 QY 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGGTGGTGGCAGCGCGCGTGG 660
 Db 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGGTGGTGGCAGCGCGCGTGG 660
 QY 661 TGGCACCGGATGAGCTGCGCGCGGCGATCGACGCGCGACGT 705
 Db 661 TGGCACCGGATGAGCTGCGCGCGGCGATCGACGCGCGACGT 705

RESULT 4

US-09-285-306-7
 ; Sequence 7, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gengeras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-0185700S
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 7
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-7

Query Match 100.0%; Score 705; DB 9; Length 705;
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CCCAGGAGTGGAGCGGATCACACCGGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
 Db 1 CCCAGGAGTGGAGCGGATCACACCGGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
 QY 61 CGATCAAGGAGTCTTCGGCACCAGCCAGCTGTCCCGATTCTATCGACACGACCAACCCGC 120

Db 61 CGATCAAGGAGTCTTCGGCACCAGCCAGCTGTCCCGATTCTATCGACACGACCAACCCGC 120
 QY 121 TGTGGGGCTCACCACAGCGCGCCCTGTTCGGCGCTGGGCCGGTGGTCTGTCCCGGG 180
 Db 121 TGTGGGGCTCACCACAGCGCGCCCTGTTCGGCGCTGGGCCGGTGGTCTGTCCCGGG 180
 QY 181 AGCGGGCGGGCTGGAGTCCGCGACGTGACACCGCTCCCACTACGCGCGGATGTGCCGA 240
 Db 181 AGCGGGCGGGCTGGAGTCCGCGACGTGACACCGCTCCCACTACGCGCGGATGTGCCGA 240
 QY 241 TCGAGACCCCGGAGGTCCCAACATCGTCTGATCGGCTCGCTGTCGCTGATGCGCGG 300
 Db 241 TCGAGACCCCGGAGGTCCCAACATCGTCTGATCGGCTCGCTGTCGCTGATGCGCGG 300
 QY 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGTGGTGCACGCGTGTCAACG 360
 Db 301 TCAACCCGTTCCGGTTCATCGAGACCGCTACCGCAAGTGGTGCACGCGTGTCAACG 360
 QY 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCCACGTTGTCGCGAGGCCAACT 420
 Db 361 ACAGATCCACTACTGACCCCGACGAGGAGGACCGCCACGTTGTCGCGAGGCCAACT 420
 QY 421 CGCGATCGACGACAAAGGCGCGGTTTCGCGAGGCGCGGTTGCTGTCGCGCGCAAGGCGG 480
 Db 421 CGCGATCGACGACAAAGGCGCGGTTTCGCGAGGCGCGGTTGCTGTCGCGCGCAAGGCGG 480
 QY 481 GCGAGTTCGAGTTCGCTCTCCGAGGTGGACTACATGACGCTGTGTCGCGCGCCAGA 540
 Db 481 GCGAGTTCGAGTTCGCTCTCCGAGGTGGACTACATGACGCTGTGTCGCGCGCCAGA 540
 QY 541 TGGTGTTCGTTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGCGCAACCGTGCCC 600
 Db 541 TGGTGTTCGTTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGCGCAACCGTGCCC 600
 QY 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGGTGGTGGCAGCGCGCGTGG 660
 Db 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGGTGGTGGCAGCGCGCGTGG 660
 QY 661 TGGCACCGGATGAGCTGCGCGCGGCGATCGACGCGCGACGT 705
 Db 661 TGGCACCGGATGAGCTGCGCGCGGCGATCGACGCGCGACGT 705

RESULT 5

US-09-285-306-8
 ; Sequence 8, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gengeras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-0185700S
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 8
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-8

Query Match 100.0%; Score 705; DB 9; Length 705;
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CCCAGGAGTGGAGCGGATCACACCGGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
 Db 1 CCCAGGAGTGGAGCGGATCACACCGGAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60

QY 61 CGATCAAGGAGTTCTTTCGGGACAGCCAGCTGTCCAGTTTCATGGACCAGAAACCCGC 120
 Db 61 CGATCAAGGAGTTCTTTCGGGACAGCCAGCTGTCCAGTTTCATGGACCAGAAACCCGC 120
 QY 121 TGTTCGGGGCTCACCCAAAGCGCGCTGTTCGGGCTGGGCCCGGGTGTCTGTCCCGGG 180
 Db 121 TGTTCGGGGCTCACCCAAAGCGCGCTGTTCGGGCTGGGCCCGGGTGTCTGTCCCGGG 180
 QY 181 AGCGGGCCGGGCTGGAGGTCCGGAGCTGACCCCGTCCCACTACGGCCGGATGTGCCCGA 240
 Db 181 AGCGGGCCGGGCTGGAGGTCCGGAGCTGACCCCGTCCCACTACGGCCGGATGTGCCCGA 240
 QY 241 TCAGAGCCCCGGAGGTCCCAATCGGTCTGATCGGCTCGCTGTTCGGTGTATGCCGGG 300
 Db 241 TCAGAGCCCCGGAGGTCCCAATCGGTCTGATCGGCTCGCTGTTCGGTGTATGCCGGG 300
 QY 301 TCAACCGGTTTCGGGTTTCATCGAGACGCGCTACCGCAAGGTGGTTCGACGGCGTGTCAACG 360
 Db 301 TCAACCGGTTTCGGGTTTCATCGAGACGCGCTACCGCAAGGTGGTTCGACGGCGTGTCAACG 360
 QY 361 ACAGATTCACCTACTGACCCGAGACGAGGAGACCGCCACGTGGTGGCCAGGCCAACT 420
 Db 361 ACAGATTCACCTACTGACCCGAGACGAGGAGACCGCCACGTGGTGGCCAGGCCAACT 420
 QY 421 CGCGGATCGACGACAAAGGCGCGTTCCGCGAGGCCCGGGTCTGTCTCCGCGCAAGCGG 480
 Db 421 CGCGGATCGACGACAAAGGCGCGTTCCGCGAGGCCCGGGTCTGTCTCCGCGCAAGCGG 480
 QY 481 GCAGGTTCGAGTACGTGCCCTCGTCCGAGGTGACTACATGGACGTGTTCGCGCGCCAGA 540
 Db 481 GCAGGTTCGAGTACGTGCCCTCGTCCGAGGTGACTACATGGACGTGTTCGCGCGCCAGA 540
 QY 541 TGTGTTCGGTGGCCACCGGATATCCCGTTCCTCGAGCACGACGACCCAAACCGTGCCC 600
 Db 541 TGTGTTCGGTGGCCACCGGATATCCCGTTCCTCGAGCACGACGACCCAAACCGTGCCC 600
 QY 601 TGATGGCGCCAAACATGACGCGCCAGCGGTTCGCTGGTGGCCAGGCGCGCGCTGG 660
 Db 601 TGATGGCGCCAAACATGACGCGCCAGCGGTTCGCTGGTGGCCAGGCGCGCGCTGG 660
 QY 661 TGGGCACCGGCATGGAGCTGCGCGCGCGCATCGACGCGCGGAGCT 705
 Db 661 TGGGCACCGGCATGGAGCTGCGCGCGCGCATCGACGCGCGGAGCT 705

RESULT 6

US-09-285-306-9

; Sequence 9, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingeras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; EARLIER FILING DATE: 1999-04-02
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 9
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-9

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2,1e-154; Indels 0; Gaps 0;

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCCCTGTATCAATCCGTCAGTCGTGGCGG 60

Db 1 CCCAGGAGCTGGAGGCGATCACACCGCAGACCCCTGTATCAATCCGTCAGTCGTGGCGG 60
 QY 61 CGATCAAGGAGTTCTTTCGGGACAGCCAGCTGTCCAGTTTCATGGACCAGAAACCCGC 120
 Db 61 CGATCAAGGAGTTCTTTCGGGACAGCCAGCTGTCCAGTTTCATGGACCAGAAACCCGC 120
 QY 121 TGTTCGGGGCTCACCCAAAGCGCGCTGTTCGGGCTGGGCCCGGGTGTCTGTCCCGGG 180
 Db 121 TGTTCGGGGCTCACCCAAAGCGCGCTGTTCGGGCTGGGCCCGGGTGTCTGTCCCGGG 180
 QY 181 AGCGGGCCGGGCTGGAGGTCCGGAGCTGACCCCGTCCCACTACGGCCGGATGTGCCCGA 240
 Db 181 AGCGGGCCGGGCTGGAGGTCCGGAGCTGACCCCGTCCCACTACGGCCGGATGTGCCCGA 240
 QY 241 TCAGAGCCCCGGAGGTCCCAATCGGTCTGATCGGCTCGCTGTTCGGTGTATGCCGGG 300
 Db 241 TCAGAGCCCCGGAGGTCCCAATCGGTCTGATCGGCTCGCTGTTCGGTGTATGCCGGG 300
 QY 301 TCAACCGGTTTCGGGTTTCATCGAGACGCGCTACCGCAAGGTGGTTCGACGGCGTGTCAACG 360
 Db 301 TCAACCGGTTTCGGGTTTCATCGAGACGCGCTACCGCAAGGTGGTTCGACGGCGTGTCAACG 360
 QY 361 ACAGATTCACCTACTGACCCGAGACGAGGAGACCGCCACGTGGTGGCCAGGCCAACT 420
 Db 361 ACAGATTCACCTACTGACCCGAGACGAGGAGACCGCCACGTGGTGGCCAGGCCAACT 420
 QY 421 CGCGGATCGACGACAAAGGCGCGTTCCGCGAGGCCCGGGTCTGTCTCCGCGCAAGCGG 480
 Db 421 CGCGGATCGACGACAAAGGCGCGTTCCGCGAGGCCCGGGTCTGTCTCCGCGCAAGCGG 480
 QY 481 GCAGGTTCGAGTACGTGCCCTCGTCCGAGGTGACTACATGGACGTGTTCGCGCGCCAGA 540
 Db 481 GCAGGTTCGAGTACGTGCCCTCGTCCGAGGTGACTACATGGACGTGTTCGCGCGCCAGA 540
 QY 541 TGTGTTCGGTGGCCACCGGATATCCCGTTCCTCGAGCACGACGACCCAAACCGTGCCC 600
 Db 541 TGTGTTCGGTGGCCACCGGATATCCCGTTCCTCGAGCACGACGACCCAAACCGTGCCC 600
 QY 601 TGATGGCGCCAAACATGACGCGCCAGCGGTTCGCTGGTGGCCAGGCGCGCGCTGG 660
 Db 601 TGATGGCGCCAAACATGACGCGCCAGCGGTTCGCTGGTGGCCAGGCGCGCGCTGG 660
 QY 661 TGGGCACCGGCATGGAGCTGCGCGCGCGCATCGACGCGCGGAGCT 705
 Db 661 TGGGCACCGGCATGGAGCTGCGCGCGCGCATCGACGCGCGGAGCT 705

RESULT 7

US-09-285-306-12
 ; Sequence 12, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingeras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; EARLIER FILING DATE: 1999-04-02
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 12
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-12

Query Match 100.0%; Score 705; DB 9; Length 705;

Best Local Similarity 100.0%; Pred. No. 2,1e-154; Indels 0; Gaps 0;

Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGGATCACACCGCAGACCTGATCAACATCCGTCCAGTCGTGGCGG 60
 Db 1 CCCAGAGCTGGAGGGATCACACCGCAGACCTGATCAACATCCGTCCAGTCGTGGCGG 60
 QY 61 CGATCAAGAGGTTCTTCCGACACCGCAGCAGCTGTCCAGTTTCATGGACCAAGAACACCCCGC 120
 Db 61 CGATCAAGAGGTTCTTCCGACACCGCAGCAGCTGTCCAGTTTCATGGACCAAGAACACCCCGC 120
 QY 121 TGTCCGGGCTCAACCAAGCGCCGCTGTCCGGCGTTCGGCCCGGGTGTCTGTCCCGGG 180
 Db 121 TGTCCGGGCTCAACCAAGCGCCGCTGTCCGGCGTTCGGCCCGGGTGTCTGTCCCGGG 180
 QY 181 AGCGGGCCGGGCTGAGGTCGCGAGCTGCGGCTCGCTGTCCGGTTCATGGCCCGGATGTGCCCGA 240
 Db 181 AGCGGGCCGGGCTGAGGTCGCGAGCTGCGGCTCGCTGTCCGGTTCATGGCCCGGATGTGCCCGA 240
 QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGCTGTCCGGTTCATGGCCCGGATGTGCCCGG 300
 Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGCTGTCCGGTTCATGGCCCGGATGTGCCCGG 300
 QY 301 TCACCCGTTCCGGTTCATCGAGACCGCTACCGAAGTGTGTGACGCGCGTGTACCG 360
 Db 301 TCACCCGTTCCGGTTCATCGAGACCGCTACCGAAGTGTGTGACGCGCGTGTACCG 360
 QY 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCCACCTGTGTGGCGGAGGCAACT 420
 Db 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCCACCTGTGTGGCGGAGGCAACT 420
 QY 421 CGCCGATCGACGACAAAGGCGCCGGTTCGCGAGGCGCCGGTGTGTGTCGCGCAAGGGCGG 480
 Db 421 CGCCGATCGACGACAAAGGCGCCGGTTCGCGAGGCGCCGGTGTGTGTCGCGCAAGGGCGG 480
 QY 481 GCGAGTCAAGTACGTGCCCTCGTCGAGGTGGAATACATGACGCTGTCCGCGCCGACAGA 540
 Db 481 GCGAGTCAAGTACGTGCCCTCGTCGAGGTGGAATACATGACGCTGTCCGCGCCGACAGA 540
 QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACACGACGACGCGCGCTGG 600
 Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACACGACGACGCGCGCTGG 600
 QY 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 660
 Db 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 660
 QY 661 TGGGACCGGCATGAGCTGCGCGCGGCGATCGACGCGCGACGT 705
 Db 661 TGGGACCGGCATGAGCTGCGCGCGGCGATCGACGCGCGACGT 705

RESULT 8

US-09-285-306-13

; Sequence 13, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingeras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 13
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium

Query Match

100.0%; Score 705; DB 9; Length 705;

US-09-285-306-13

Best Local Similarity 100.0%; Pred. No. 2.1e-154;
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGGGATCACACCGCAGACCTGATCAACATCCGTCCAGTCGTGGCGG 60
 Db 1 CCCAGAGCTGGAGGGATCACACCGCAGACCTGATCAACATCCGTCCAGTCGTGGCGG 60
 QY 61 CGATCAAGAGGTTCTTCCGACACCGCAGCAGCTGTCCAGTTTCATGGACCAAGAACACCCCGC 120
 Db 61 CGATCAAGAGGTTCTTCCGACACCGCAGCAGCTGTCCAGTTTCATGGACCAAGAACACCCCGC 120
 QY 121 TGTCCGGGCTCAACCAAGCGCCGCTGTCCGGCGTTCGGCCCGGGTGTCTGTCCCGGG 180
 Db 121 TGTCCGGGCTCAACCAAGCGCCGCTGTCCGGCGTTCGGCCCGGGTGTCTGTCCCGGG 180
 QY 181 AGCGGGCCGGGCTGAGGTCGCGAGCTGCGGCTCGCTGTCCGGTTCATGGCCCGGATGTGCCCGA 240
 Db 181 AGCGGGCCGGGCTGAGGTCGCGAGCTGCGGCTCGCTGTCCGGTTCATGGCCCGGATGTGCCCGA 240
 QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGCTGTCCGGTTCATGGCCCGGATGTGCCCGG 300
 Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGCTGTCCGGTTCATGGCCCGGATGTGCCCGG 300
 QY 301 TCACCCGTTCCGGTTCATCGAGACCGCTACCGAAGTGTGTGACGCGCGTGTACCG 360
 Db 301 TCACCCGTTCCGGTTCATCGAGACCGCTACCGAAGTGTGTGACGCGCGTGTACCG 360
 QY 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCCACCTGTGTGGCGGAGGCAACT 420
 Db 361 ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCCACCTGTGTGGCGGAGGCAACT 420
 QY 421 CGCCGATCGACGACAAAGGCGCCGGTTCGCGAGGCGCCGGTGTGTGTCGCGCAAGGGCGG 480
 Db 421 CGCCGATCGACGACAAAGGCGCCGGTTCGCGAGGCGCCGGTGTGTGTCGCGCAAGGGCGG 480
 QY 481 GCGAGTCAAGTACGTGCCCTCGTCGAGGTGGAATACATGACGCTGTCCGCGCCGACAGA 540
 Db 481 GCGAGTCAAGTACGTGCCCTCGTCGAGGTGGAATACATGACGCTGTCCGCGCCGACAGA 540
 QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACACGACGACGCGCGCTGG 600
 Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACACGACGACGCGCGCTGG 600
 QY 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 660
 Db 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 660
 QY 661 TGGGACCGGCATGAGCTGCGCGCGGCGATCGACGCGCGACGT 705
 Db 661 TGGGACCGGCATGAGCTGCGCGCGGCGATCGACGCGCGACGT 705

RESULT 9

US-09-285-306-14

; Sequence 14, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingeras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 14
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium

US-09-285-306-14

```

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCAGAGCTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCAGTCTGTGGCGG 60
Db 1 CCAGAGCTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCAGTCTGTGGCGG 60
Qy 61 CGATCAAGAGGTTCTTTCGGCACCCAGCAGTGTCCCAAGTTCATGGACAGAAACCCGC 120
Db 61 CGATCAAGAGGTTCTTTCGGCACCCAGCAGTGTCCCAAGTTCATGGACAGAAACCCGC 120
Qy 121 TGTGGGGCTCACCCACAGCGCGCTGTGGGGCTGGGGCGGGTGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAGCGCGCTGTGGGGCTGGGGCGGGTGTCTGTCCCGGG 180
Qy 181 AGCGGGCCGGCTGGAGTCCGCGACGTGCACCCGTCCTCCACTACGCGCGGATGTGCCCGA 240
Db 181 AGCGGGCCGGCTGGAGTCCGCGACGTGCACCCGTCCTCCACTACGCGCGGATGTGCCCGA 240
Qy 241 TCAGAGCCCGGAGGTTCCAAATTCGGTCTGTATCGGCTCGTGTCTGTATTCGGCGGG 300
Db 241 TCAGAGCCCGGAGGTTCCAAATTCGGTCTGTATCGGCTCGTGTCTGTATTCGGCGGG 300
Qy 301 TCACCCGTTCCGGTTCATCGAGAGCGCGTACCGCAAGGTGGTTCGACGGGTGTTCACCG 360
Db 301 TCACCCGTTCCGGTTCATCGAGAGCGCGTACCGCAAGGTGGTTCGACGGGTGTTCACCG 360
Qy 361 ACAGATCCACTACTCTGACCGCGCAGCAGGAGGACCGCCACGTCGTGGCGCAGGCCAACT 420
Db 361 ACAGATCCACTACTCTGACCGCGCAGCAGGAGGACCGCCACGTCGTGGCGCAGGCCAACT 420
Qy 421 CGCGGATCGAGCAAGGCGCGGTTCCGAGGAGCGCGGTCGTGGTCCGCGCGCAGG 480
Db 421 CGCGGATCGAGCAAGGCGCGGTTCCGAGGAGCGCGGTCGTGGTCCGCGCGCAGG 480
Qy 481 GCAGAGTCGAGTACGTGCTCCCTGTCGAGGTGGACTACATGGAGCTGTTCGCGCGCAGG 540
Db 481 GCAGAGTCGAGTACGTGCTCCCTGTCGAGGTGGACTACATGGAGCTGTTCGCGCGCAGG 540
Qy 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCAGCCCAACCGTCCCC 600
Db 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCAGCCCAACCGTCCCC 600
Qy 601 TGATGGCGCCCAACATCGAGCGCAGCGGTTCCGCTGTGGTTCGCGAGCAGCGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATCGAGCGCAGCGGTTCCGCTGTGGTTCGCGAGCAGCGCGCGCTGG 660
Qy 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705

```

RESULT 10

```

US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA

```

ORGANISM: Mycobacterium avium

US-09-285-306-16

```

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCAGAGCTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCAGTCTGTGGCGG 60
Db 1 CCAGAGCTGGAGGCGATCACACCGCAGACCCCTGTATCAACATCCGTCAGTCTGTGGCGG 60
Qy 61 CGATCAAGAGGTTCTTTCGGCACCCAGCAGTGTCCCAAGTTCATGGACAGAAACCCGC 120
Db 61 CGATCAAGAGGTTCTTTCGGCACCCAGCAGTGTCCCAAGTTCATGGACAGAAACCCGC 120
Qy 121 TGTGGGGCTCACCCACAGCGCGCTGTGGGGCTGGGGCGGGTGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAGCGCGCTGTGGGGCTGGGGCGGGTGTCTGTCCCGGG 180
Qy 181 AGCGGGCCGGCTGGAGTCCGCGACGTGCACCCGTCCTCCACTACGCGCGGATGTGCCCGA 240
Db 181 AGCGGGCCGGCTGGAGTCCGCGACGTGCACCCGTCCTCCACTACGCGCGGATGTGCCCGA 240
Qy 241 TCAGAGCCCGGAGGTTCCAAATTCGGTCTGTATCGGCTCGTGTCTGTATTCGGCGGG 300
Db 241 TCAGAGCCCGGAGGTTCCAAATTCGGTCTGTATCGGCTCGTGTCTGTATTCGGCGGG 300
Qy 301 TCACCCGTTCCGGTTCATCGAGAGCGCGTACCGCAAGGTGGTTCGACGGGTGTTCACCG 360
Db 301 TCACCCGTTCCGGTTCATCGAGAGCGCGTACCGCAAGGTGGTTCGACGGGTGTTCACCG 360
Qy 361 ACAGATCCACTACTCTGACCGCGCAGCAGGAGGACCGCCACGTCGTGGCGCAGGCCAACT 420
Db 361 ACAGATCCACTACTCTGACCGCGCAGCAGGAGGACCGCCACGTCGTGGCGCAGGCCAACT 420
Qy 421 CGCGGATCGAGCAAGGCGCGGTTCCGAGGAGCGCGGTCGTGGTCCGCGCGCAGG 480
Db 421 CGCGGATCGAGCAAGGCGCGGTTCCGAGGAGCGCGGTCGTGGTCCGCGCGCAGG 480
Qy 481 GCAGAGTCGAGTACGTGCTCCCTGTCGAGGTGGACTACATGGAGCTGTTCGCGCGCAGG 540
Db 481 GCAGAGTCGAGTACGTGCTCCCTGTCGAGGTGGACTACATGGAGCTGTTCGCGCGCAGG 540
Qy 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCAGCCCAACCGTCCCC 600
Db 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGCAGCAGCCCAACCGTCCCC 600
Qy 601 TGATGGCGCCCAACATCGAGCGCAGCGGTTCCGCTGTGGTTCGCGAGCAGCGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATCGAGCGCAGCGGTTCCGCTGTGGTTCGCGAGCAGCGCGCGCTGG 660
Qy 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGACGT 705

```

RESULT 11

```

US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24

```

```
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; TYPE: DNA
; LENGTH: 705
; ORGANISM: Mycobacterium avium
US-09-285-306-17

Query Match      99.8%; Score 703.4; DB 9; Length 705;
Best Local Similarity 99.9%; Pred. No. 4.9e-154;
Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 CCCAGGAGTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCGATCCAGTCGTGGCGG 60
Db 1 CCCAGGAGTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCGATCCAGTCGTGGCGG 60
QY 61 CGATCAAGGAGTCTTCCGCGACCCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCCG 120
Db 61 CGATCAAGGAGTCTTCCGCGACCCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCCG 120
QY 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGCGCTCGGGCCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGCGCTCGGGCCCGGGTGGTCTGTCCCGGG 180
QY 181 AGCGGGCCGGGTGGAGTCCGCGACGTCGACCCGTCCTGATCGGCTCGCTGCGGTGATGCGCGG 300
Db 181 AGCGGGCCGGGTGGAGTCCGCGACGTCGACCCGTCCTGATCGGCTCGCTGCGGTGATGCGCGG 300
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGATCGGCTCGCTGCGGTGATGCGCGG 360
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGATCGGCTCGCTGCGGTGATGCGCGG 360
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGAAGGTGGTTCGACGGCGGCAACT 420
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGAAGGTGGTTCGACGGCGGCAACT 420
QY 361 ACGAGATCCACTACTGACCGCGGAGGAGGACCGCCAGCTGCTGTCGCGAGGCGGCAACT 480
Db 361 ACGAGATCCACTACTGACCGCGGAGGAGGACCGCCAGCTGCTGTCGCGAGGCGGCAACT 480
QY 421 CGCGATCGACGACAAAGGGCGGTTTCGCGAGGCGCGGGTGGTTCGCGCGCAAGGGGG 540
Db 421 CGCGATCGACGACAAAGGGCGGTTTCGCGAGGCGCGGGTGGTTCGCGCGCAAGGGGG 540
QY 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGTGGACTACATGGAAGTGTGCGCGCGCCAGA 600
Db 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGTGGACTACATGGAAGTGTGCGCGCGCCAGA 600
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCCACCGTGGCC 660
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCCACCGTGGCC 660
QY 601 TGATGGGCGCCAAACATGACGCGCGGCGGTCGCGTTCGCGTGGTGGCGAGGCGCGCTGG 705
Db 601 TGATGGGCGCCAAACATGACGCGCGGCGGTCGCGTTCGCGTGGTGGCGAGGCGCGCTGG 705
QY 661 TGGGACCGGATGAGCTGCGCGCGGCGGATCGACGCGGCGGCACT 705
Db 661 TGGGACCGGATGAGCTGCGCGCGGCGGATCGACGCGGCGGCACT 705

RESULT 13
US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616

; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; TYPE: DNA
; LENGTH: 705
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CCCAGGAGTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCGATCCAGTCGTGGCGG 60
Db 1 CCCAGGAGTGGAGGCGATCACACGCGAGACCCCTGATCAACATCCGTCGATCCAGTCGTGGCGG 60
QY 61 CGATCAAGGAGTCTTCCGCGACCCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCCG 120
Db 61 CGATCAAGGAGTCTTCCGCGACCCAGCCAGCTGTCCAGTTTCATGACACAGAACACCCCG 120
QY 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGCGCTCGGGCCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCCCTGTGCGCGCTCGGGCCCGGGTGGTCTGTCCCGGG 180
QY 181 AGCGGGCCGGGTGGAGTCCGCGACGTCGACCCGTCCTGATCGGCTCGCTGCGGTGATGCGCGG 300
Db 181 AGCGGGCCGGGTGGAGTCCGCGACGTCGACCCGTCCTGATCGGCTCGCTGCGGTGATGCGCGG 300
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGATCGGCTCGCTGCGGTGATGCGCGG 360
Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCGATCGGCTCGCTGCGGTGATGCGCGG 360
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGAAGGTGGTTCGACGGCGGCAACT 420
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGAAGGTGGTTCGACGGCGGCAACT 420
QY 361 ACGAGATCCACTACTGACCGCGGAGGAGGACCGCCAGCTGCTGTCGCGAGGCGGCAACT 480
Db 361 ACGAGATCCACTACTGACCGCGGAGGAGGACCGCCAGCTGCTGTCGCGAGGCGGCAACT 480
QY 421 CGCGATCGACGACAAAGGGCGGTTTCGCGAGGCGCGGGTGGTTCGCGCGCAAGGGGG 540
Db 421 CGCGATCGACGACAAAGGGCGGTTTCGCGAGGCGCGGGTGGTTCGCGCGCAAGGGGG 540
QY 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGTGGACTACATGGAAGTGTGCGCGCGCCAGA 600
Db 481 GCGAGGTGAGTACGTGCGCTCGTCCGAGTGGACTACATGGAAGTGTGCGCGCGCCAGA 600
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCCACCGTGGCC 660
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCCACCGTGGCC 660
QY 601 TGATGGGCGCCAAACATGACGCGCGGCGGTCGCGTTCGCGTGGTGGCGAGGCGCGCTGG 705
Db 601 TGATGGGCGCCAAACATGACGCGCGGCGGTCGCGTTCGCGTGGTGGCGAGGCGCGCTGG 705
QY 661 TGGGACCGGATGAGCTGCGCGCGGCGGATCGACGCGGCGGCACT 705
Db 661 TGGGACCGGATGAGCTGCGCGCGGCGGATCGACGCGGCGGCACT 705

RESULT 12
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
```

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; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
; US-09-285-306-3

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 4.3e-152;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCCGTGCGG 60
DB 1 CCAGAGCTGGAGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCCGTGCGG 60
QY 61 CGATCAAGAGTCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAACAACCCGC 120
DB 61 CGATCAAGAGTCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAACAACCCGC 120
QY 121 TGTCCGGGCTCACCCCAAGCGCGCTGTCCGCGCTGGGCCCGGGTGTCTCTCCCGG 180
DB 121 TGTCCGGGCTCACCCCAAGCGCGCTGTCCGCGCTGGGCCCGGGTGTCTCTCCCGG 180
QY 181 AGCGGCGCGGCTGGAGGTCCGCAATCGTCTGATCGCTCGCTCGTGTATGCGCGG 240
DB 181 AGCGGCGCGGCTGGAGGTCCGCAATCGTCTGATCGCTCGCTCGTGTATGCGCGG 240
QY 241 TCAGAGACCCCGAGGTTCCCAACATCGTCTGATCGCTCGCTCGTGTATGCGCGG 300
DB 241 TCAGAGACCCCGAGGTTCCCAACATCGTCTGATCGCTCGCTCGTGTATGCGCGG 300
QY 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGCGCGTGTCA 360
DB 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGCGCGTGTCA 360
QY 361 ACAGATCCACTACCTGACCGCGAGAGACCGCCACGTCGTGGCGCAGGCCCAACT 420
DB 361 ACAGATCCACTACCTGACCGCGAGAGACCGCCACGTCGTGGCGCAGGCCCAACT 420
QY 421 CGCGGATCGAGTACGTCGCCCTCGTCCGAGTGGACTACATGGACNTKTCSCCGCGC 480
DB 421 CGCGGATCGAGTACGTCGCCCTCGTCCGAGTGGACTACATGGACNTKTCSCCGCGC 480
QY 481 GCGAGTTCGAGTACGTCGCCCTCGTCCGAGTGGACTACATGGACNTKTCSCCGCGC 540
DB 481 GCGAGTTCGAGTACGTCGCCCTCGTCCGAGTGGACTACATGGACNTKTCSCCGCGC 540
QY 541 TGGTGTGCGTGGCAGCGGATGATCCCGTTCCTCGAGCAGCAGCGGCGGCGT 600
DB 541 TGGTGTGCGTGGCAGCGGATGATCCCGTTCCTCGAGCAGCAGCGGCGGCGT 600
QY 601 TGATGGCGCCCAACATGCGAGCGGTCGTCGTGGTTCGCGAGCGGCGGCGTGG 660
DB 601 TGATGGCGCCCAACATGCGAGCGGTCGTCGTGGTTCGCGAGCGGCGGCGTGG 660
QY 661 TGGGCAACCGCATGGAGTGGCGCGCGATCGACGCGGCGGCGT 705
DB 661 TGGGCAACCGCATGGAGTGGCGCGCGATCGACGCGGCGGCGT 705

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RESULT 14
US-09-285-306-11
; Sequence 11, Application US/09285306A

```

; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (42)...(42)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (692)...(692)
; OTHER INFORMATION: n = g,a,c or t
; US-09-285-306-11

```

```

Query Match      98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 1e-151;
Matches 697; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCCGTGCGG 60
DB 1 CCAGAGCTGGAGGATCACACCGCAGACCCCTGATCAACATCCGTCAGTCCGTGCGG 60
QY 61 CGATCAAGAGTCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAACAACCCGC 120
DB 61 CGATCAAGAGTCTTCGGCACCAGCCAGCTGTCCAGTTCATGGACCAACAACCCGC 120
QY 121 TGTCCGGGCTCACCCCAAGCGCGCTGTCCGCGCTGGGCCCGGGTGTCTCTCCCGG 180
DB 121 TGTCCGGGCTCACCCCAAGCGCGCTGTCCGCGCTGGGCCCGGGTGTCTCTCCCGG 180
QY 181 AGCGGCGCGGCTGGAGGTCCGCAATCGTCTGATCGCTCGCTCGTGTATGCGCGG 240
DB 181 AGCGGCGCGGCTGGAGGTCCGCAATCGTCTGATCGCTCGCTCGTGTATGCGCGG 240
QY 241 TCAGAGACCCCGAGGTTCCCAACATCGTCTGATCGCTCGCTCGTGTATGCGCGG 300
DB 241 TCAGAGACCCCGAGGTTCCCAACATCGTCTGATCGCTCGCTCGTGTATGCGCGG 300
QY 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGCGCGTGTCA 360
DB 301 TCAACCCGTTCCGGTTCATCGAGACGCCGTACCGCAAGGTGGTTCGACGCGCGTGTCA 360
QY 361 ACAGATCCACTACCTGACCGCGAGAGACCGCCACGTCGTGGCGCAGGCCCAACT 420
DB 361 ACAGATCCACTACCTGACCGCGAGAGACCGCCACGTCGTGGCGCAGGCCCAACT 420
QY 421 CGCGGATCGAGTACGTCGCCCTCGTCCGAGTGGACTACATGGACNTKTCSCCGCGC 480
DB 421 CGCGGATCGAGTACGTCGCCCTCGTCCGAGTGGACTACATGGACNTKTCSCCGCGC 480
QY 481 GCGAGTTCGAGTACGTCGCCCTCGTCCGAGTGGACTACATGGACNTKTCSCCGCGC 540
DB 481 GCGAGTTCGAGTACGTCGCCCTCGTCCGAGTGGACTACATGGACNTKTCSCCGCGC 540
QY 541 TGGTGTGCGTGGCAGCGGATGATCCCGTTCCTCGAGCAGCAGCGGCGGCGT 600
DB 541 TGGTGTGCGTGGCAGCGGATGATCCCGTTCCTCGAGCAGCAGCGGCGGCGT 600
QY 601 TGATGGCGCCCAACATGCGAGCGGTCGTCGTGGTTCGCGAGCGGCGGCGTGG 660

```

Db 601 TGATGGCGCCAAACATGCAGCCAGCGGTTCCGCTGGCGCAGAGGCGCCGCTGG 660
QY 661 TGGGACCGGATGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705
Db 661 TGGGACCGGATGAGCTGCGCGCGGCGATGAGCGCGGCGACGT 705
RESULT 15
US-09-285-306-10
; Sequence 10, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-10

Query Match 98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 3.7e-151;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;
QY 1 CCCAGGACGTGGAGGCGATCACCGCAGACCTGATCAACATCCGTCCAGTCCGTGGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACCGCAGACCTGATCAACATCCGTCCGTGGCGG 60
QY 61 CGATCAAGGAGTCTTCCGGACCCAGCAGCTGCCAGTTCATGSAACGACAAACCCGC 120
Db 61 CGATCAAGGAGTCTTCCGGACCCAGCAGCTGCCAGTTCATGSAACGACAAACCCGC 120
QY 121 TGTGGGCTCACCCACAAGGCGCCCTGTGCGCGCTGGGCGCGGCTGTCTGTCGCGG 180
Db 121 TGTGGGCTCACCCACAAGGCGCCCTGTGCGCGCTGGGCGCGGCTGTCTGTCGCGG 180
QY 181 AGCGGCGCGGCTGAGGTCCGCGACGTGCACCCGTCGACCTACCGCGGATGTCCCGA 240
Db 181 AGCGGCGCGGCTGAGGTCCGCGACGTGCACCCGTCGACCTACCGCGGATGTCCCGA 240
QY 241 TCGAGACCCGAGGCTCCCAACATCGGTCTGATCGGCTCGGTGTCGGTATCGCGGG 300
Db 241 TCGAGACCCGAGGCTCCCAACATCGGTCTGATCGGCTCGGTGTCGGTATCGCGGG 300
QY 301 TCAACCCGTTCCGGTTTCATCGAGACGCGGTACCGCAAGGTGCTGACGCGCGTGTCA 360
Db 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGGTGCTGACCGGTGTGTC 360
QY 361 ACGAGATCCACTACTGACCCCGACGAGGAGCCGCAAGTGGTGGTGGCGAGGCCAACT 420
Db 361 ACGAGATCCACTACTGACCCCGACGAGGAGCCGCAAGTGGTGGTGGCGAGGCCAACT 420
QY 421 CGCCGATCGACAAAGGCGCGTTTCGCGAGGCGCGGCTGGTCCGCGCAGGCGG 480
Db 421 CGCCGATCGACAAAGGCGCGTTTCGCGAGGAGKCCCGGCTGGTCCGCGSAAGCGG 480
QY 481 GCGAGGTGAGTACGTGCTCCGAGGTGGACTACATGACGTGTGCGCGCCAGAG 540
Db 481 GCGAGGTGAGTACGTGCTCCGAGGTGGACTACATGACGTGTGCGCGCCAGAG 540
QY 541 TGGTGTGCGTGGCCACCCGCGATGATCCCGTTCTCTGAGCAAGCAAGCCAAACCGT 600
Db 541 TGGTGTGCGTGGCCACCCGCGATGATCCCGTTCTCTGAGCAAGCAAGCCAAACCGT 600

QY 601 TGATGGCGCCAAACATGCAGCCAGCGGTTCCGCTGGCGCAGAGGCGCCGCTGG 660
Db 601 TGATGGCGCCAAACATGCAGCCAGCGGTTCCGCTGGCGCAGAGGCGCCGCTGG 660
QY 661 TGGGACCGGATGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705
Db 661 TGGGACCGGATGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705

Search completed: August 20, 2004, 01:36:42
Job time : 408.972 secs

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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 12:36:51 ; Search time 66.4446 Seconds
(without alignments)
5888.223 Million cell updates/sec

Title: US-09-285-306-9

Perfect score: 705

Sequence: 1 cccagcagctggaggcgatc.....ggcgatcgacggcgagct 705

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

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4: /cgn2_6/ptodata/2/ina/6B COMB.seq: *
5: /cgn2_6/ptodata/2/ina/PCTUS COMB.seq: *
6: /cgn2_6/ptodata/2/ina/backfiles1.seq: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	610.6	86.6	706	3	US-08-797-812-24
2	603	85.5	4403765	3	US-09-103-840A-2
3	603	85.5	4411529	3	US-09-103-840A-1
4	558.2	79.2	3447	2	US-08-313-185-57
5	558.2	79.2	3447	3	US-09-082-614A-57
6	540.4	76.7	970	1	US-08-250-030-1
7	540.4	76.7	970	5	PCT-US95-06790-1
8	530.4	75.2	620	2	US-08-757-653-135
9	530.4	75.2	620	2	US-08-757-653-135
10	530.4	75.2	620	2	US-08-757-653-138
11	530.4	75.2	620	4	US-08-520-946-135
12	530.4	75.2	620	4	US-08-520-946-138
13	530.4	75.2	620	4	US-09-655-378A-135
14	528.8	75.0	620	2	US-08-757-653-136
15	528.8	75.0	620	2	US-08-757-653-137
16	528.8	75.0	620	2	US-08-757-653-139
17	528.8	75.0	620	2	US-08-757-653-140
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19	528.8	75.0	620	4	US-08-520-946-137
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23	528.8	75.0	620	4	US-09-655-378A-137
24	528.8	75.0	620	4	US-09-655-378A-139
25	528.8	75.0	620	4	US-09-655-378A-140
26	453.4	64.3	706	3	US-08-797-812-25
27	371.2	52.7	4074	4	US-09-252-991A-4737

28 371.2 52.7 4092 4 US-09-252-991A-4771 Sequence 4771, Ap
29 337.2 47.8 4083 4 US-09-489-039A-22 Sequence 22, Appl
30 337.2 47.8 4206 4 US-09-489-039A-30 Sequence 30, Appl
31 293.4 41.6 432 2 US-08-313-185-59 Sequence 59, Appl
32 293.4 41.6 432 3 US-09-082-614A-59 Sequence 59, Appl
33 286.2 40.6 324 4 US-08-750-088A-36 Sequence 36, Appl
34 286.2 40.6 324 4 US-09-722-319-36 Sequence 36, Appl
35 265.2 37.6 2964 4 US-09-540-236-1097 Sequence 1097, Ap
36 265.2 37.6 3167 4 US-09-543-681A-3177 Sequence 3177, Ap
37 265.2 37.6 31063 4 US-09-596-002-20 Sequence 20, Appl
38 255.6 36.3 319 4 US-08-750-088A-35 Sequence 35, Appl
39 255.6 36.3 319 4 US-09-722-319-35 Sequence 35, Appl
40 249.8 35.4 11935 4 US-09-634-238-401 Sequence 401, App
41 244.4 34.7 14672 4 US-08-961-521-111 Sequence 111, App
42 244.4 34.7 1830121 4 US-09-557-884-1 Sequence 1, Appli
43 244.4 34.7 1830121 4 US-09-643-990A-1 Sequence 1, Appli
44 241.2 34.2 4143 4 US-09-328-352-4006 Sequence 4006, Ap
45 226.4 32.1 329 4 US-08-750-088A-34 Sequence 34, Appl

ALIGNMENTS

RESULT 1

US-08-797-812-24
; Sequence 24, Application US/08797812
; Patent No. 6228575
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas A.
; APPLICANT: Mack, David
; APPLICANT: Chee, Mark S.
; APPLICANT: Berno, Anthony J.
; APPLICANT: Stryer, Lubert
; APPLICANT: Ghandour, Ghassan
; APPLICANT: Wang, Ching
; TITLE OF INVENTION: Chip-Based Species Identification and
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/797,812
; FILING DATE: 07-FEB-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/017,765
; FILING DATE: 15-MAY-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/629,031
; FILING DATE: 08-APR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/012,631
; FILING DATE: 01-MAR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/011,339
; FILING DATE: 08-FEB-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Fitts, Renee A.
; REGISTRATION NUMBER: 35,136
; REFERENCE/DOCKET NUMBER: 16528X-018550
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-326-2400
; TELEFAX: 415-326-2422

FILE REFERENCE: 24366-20007.00
CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT FILING DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2
LENGTH: 4403765
TYPE: DNA
ORGANISM: Mycobacterium tuberculosis
FEATURE:
OTHER INFORMATION: CDC 1551
OTHER INFORMATION: "n" bases at various positions throughout the sequence
OTHER INFORMATION: represent a, t, c or g
US-09-103-840A-2

Query Match 85.5%; Score 603; DB 3; Length 4403765;
Best Local Similarity 91.4%; Pred. No. 3.9e-110;
Matches 639; Conservative 0; Mismatches 60; Indels 0; Gaps 0;

Qy 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCCGTCCAGTCCGTGGCGG 60
Db 762963 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCCGCGGTGGTGGCGG 763022
Qy 61 CGATCAAGGAGTTCTTCGGCACCCAGCCAGTGTCCAGTTTCATGACCAAGAAACAACCCGC 120
Db 763023 CGATCAAGGAGTTCTTCGGCACCCAGCCAGTGTTCATGACCAAGAAACAACCCGC 763082
Qy 121 TGTGGGGGTACCCACAGCGCCGCTGTCCGGCTGGGGTGGGGTGGTGGTGGTGGTGGTGGTGG 180
Db 763083 TGTGGGGGTACCCACAGCGCCGCTGTCCGGCTGGGGTGGGGTGGTGGTGGTGGTGGTGG 763142
Qy 181 AGCGGCGCGGCTGGAGTCCGCGAGTGCACCCGCTCCACTACGCGCGGATGCGCCGA 240
Db 763143 AGCGGCGCGGCTGGAGTCCGCGAGTGCACCCGCTCCACTACGCGCGGATGCGCCGA 763202
Qy 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCTGTGCTGTGCTGTGCTG 300
Db 763203 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCTGTGCTGTGCTGTGCTG 763262
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGAGGTGGTTCGACGGCGTGTGTCACCG 360
Db 763263 TCAACCCGTTCCGGTTTCATCGAGACCGCTACCGAGGTGGTTCGACGGCGTGTGTCACCG 763322
Qy 361 ACCAGATCCACTACCTACCGCCGACGAGGAGGACCGCCACGCTGGTGGCGAGGCCCAACT 420
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Qy 421 CGCGGATCGACGACAAAGGGCCGGTTCCGGAGGCGCGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 480
Db 763383 CGCGGATCGATGCGGACGGTCTGCTCGAGCGCGCGTCTGCTCGAGCGCGCGTCTGCTCGAGCGCG 763442
Qy 481 GCGAGGTGAGTACGTGCTTCCGAGGTGGACTACATGGAGGTTCGAGCGGTTCGCGCGCGCGAGA 540
Db 763443 GCGAGGTGAGTACGTGCTTCCGAGGTGGACTACATGGAGGTTCGAGCGGTTCGCGCGCGCGAGA 763502
Qy 541 TGGTGTGGTGGCGACCGCGATATCCGTTCTCTCGAGACGACGACGACGACGACGACGACGACGACG 600
Db 763503 TGGTGTGGTGGCGACCGCGATATCCGTTCTCTCGAGACGACGACGACGACGACGACGACGACGACG 763562
Qy 601 TGATGGCGCCCAACATCGAGCGCGCGGTTCGCTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 660
Db 763563 TCATGGCGCCAAACATCGAGCGCGCGGTTCGCTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 763622
Qy 661 TGGGACCGGATGGAGCTGCGCGCGCGATCGAGCGCG 699
Db 763623 TGGGACCGGATGGAGCTGCGCGCGCGATCGAGCGCG 763661

RESULT 3
US-09-103-840A-1
; Sequence 1, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen K.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS

INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 706 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
US-08-797-812-24

Query Match 86.6%; Score 610.6; DB 3; Length 706;
Best Local Similarity 91.6%; Pred. No. 8.1e-112;
Matches 546; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

Qy 1 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCCGTCCAGTCCGTGGCGG 60
Db 2 CCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCCGCGGTGGTGGCGG 61
Qy 61 CGATCAAGGAGTTCTTCGGCACCCAGCCAGTGTCCAGTTTCATGACCAAGAAACAACCCGC 120
Db 62 CGATCAAGGAGTTCTTCGGCACCCAGCCAGTGTGACCAATTCATGACCAAGAAACAACCCGC 121
Qy 121 TGTGGGGGTACCCACAGCGCCGCTGTCCGGCTGGGGTGGGGTGGTGGTGGTGGTGGTGGTGG 180
Db 122 TGTGGGGGTACCCACAGCGCCGCTGTCCGGCTGGGGTGGGGTGGTGGTGGTGGTGGTGGTGG 181
Qy 181 AGCGGCGCGGCTGGAGTCCGCGAGTGCACCCGCTCCACTACGCGCGGATGCGCCGA 240
Db 182 AGCGGCGCGGCTGGAGTCCGCGAGTGCACCCGCTCCACTACGCGCGGATGCGCCGA 241
Qy 241 TCAGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCTGTGCTGTGCTGTGCTG 300
Db 242 TCAGAGACCCCTGAGGGGCCCAACATCGGTCTGATCGGCTCGCTGTGCTGTGCTGTGCTGTGCTG 301
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACCGCTTACCGAGGTGGTTCGACGGCGTGTGTCACCG 360
Db 302 TCAACCCGTTCCGGTTTCATCGAGACCGCTTACCGAGGTGGTTCGACGGCGTGTGTCACCG 361
Qy 361 ACAGATCCACTACCTACCGCCGACGAGGAGGACCGCCACGCTGGTGGCGAGGCCCAACT 420
Db 362 ACAGATCCACTACCTACCGCCGACGAGGAGGACCGCCACGCTGGTGGCGAGGCCCAACT 421
Qy 421 CGCGGATCGACGACAAAGGGCCGGTTCCGGAGGCGCGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 480
Db 422 CGCGGATCGATGCGGACGGTCTGCTCGAGCGCGCGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 481
Qy 481 GCGAGGTGAGTACGTGCCCTCTCGAGGTGGACTACATGGAGGTTCGCGCGCGCGCAGA 540
Db 482 GCGAGGTGAGTACGTGCCCTCTCGAGGTGGACTACATGGAGGTTCGCGCGCGCGCAGA 541
Qy 541 TGGTGTGGTGGCGACCGCGATATCCGTTCTCTCGAGACGACGACGACGACGACGACGACGACGACG 600
Db 542 TGGTGTGGTGGCGACCGCGATATCCGTTCTCTCGAGACGACGACGACGACGACGACGACGACGACG 601
Qy 601 TGATGGCGCCCAACATCGAGCGCGCGGTTCGCTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 660
Db 602 TCATGGCGCCAAACATCGAGCGCGCGGTTCGCTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 661
Qy 661 TGGGACCGGATGGAGCTGCGCGCGCGATCGAGCGCGGACGT 705
Db 662 TGGGACCGGATGGAGCTGCGCGCGCGATCGAGCGCGGACGT 706

RESULT 2
US-09-103-840A-2
; Sequence 2, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen K.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS

```
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match      85.5%; Score 603; DB 3; Length 4411529;
Best Local Similarity 91.4%; Pred No. 3.9e-110; Indels 0; Gaps 0;
Matches 639; Conservative 0; Mismatches 60;

QY 1 CCCAGGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCGTCCAGTCTGTGGCGG 60
DB 761003 CCCAGGAGCTGGAGGCGATCAACCGCAGACCGTTCATCAACATCGGCGGTGTGGCGG 761062

QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCAGTTGATGACCAAGCAACCCCGC 120
DB 761063 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTGAGCCAAATTCATGACCAGCAACCCCGC 761122

QY 121 TGTGGGCTCAACCAAGCGCCCTGTTCGGCGCTGGCGCGGTGTCTGTCCCGGG 180
DB 761123 TGTGGGCTTACCAACAGCGCCACTGTTCGGCGCTGGCGCGGTGTCTGTCCCGGG 761182

QY 181 AGCGGGCGGCTGAGTTCGCGCAGCTGCACCGCTCCACTACGCGCGGATGTCCCGGA 240
DB 761183 AGCGTGCAGGCTGGAGTTCGCGCAGCTGCACCGCTCCACTACGCGCGGATGTCCCGGA 761242

QY 241 TCGAGACCCCGAGGTCCTCAACATCGTCTGATCGGTTCGCTGTGATGCGGTGTACGCGCGG 300
DB 761243 TCGAACCCTTGGAGGGCCCAACATCGTCTGATCGGTTCGCTGTGATGCGGTGTACGCGCGG 761302

QY 301 TCAACCCCTTCGGGTTCATCGAGAGCGCGTACCGCAAGGTGTGACGCGGTGTTCACCG 360
DB 761303 TCAACCCCTTCGGGTTCATCGAAGCCCGTACCGCAAGGTGTGACGCGGTGTTCACCG 761362

QY 361 ACGAGATCCACTACTGACCGCCGACGAGGAGGACCGCAGCTGTGTGGCGAGCCAACT 420
DB 761363 ACGAGATCGTGTACTGACCGCCGACGAGGAGGACCGCAGCTGTGTGGCGAGCCAACT 761422

QY 421 CGCGATCGACGACAGGCGCGGTTCGCGGAGGCGCGGTGTGTGTGTCGCGCGAGGCGG 480
DB 761423 CGCGCATGATGCGGACGCGGTTCGCTTCGTGCGAGCGCGGTGTGTGTGTCGCGCGAGGCGG 761482

QY 481 CGGAGTCCAGTACGTGCGCTTCGTCCGAGGTGACATACATGACCTGTTCGCGCGCCAGA 540
DB 761483 CGGAGTCCAGTACGTGCGCTTCGTCCGAGGTGACATACATGACCTGTTCGCGCGCCAGA 761542

QY 541 TGGTTCGGTGGCCACCGCGATGATCCCGTTCCTTCAGCAGCAGCAGCAGCAGCAGTGC 600
DB 761543 TGGTTCGGTGGCCACCGCGATGATTCCTTCCTGAGCAGCAGCAGCAGCAGCAGTGC 761602

QY 601 TGATGGGCGCCACATGACGCGCAGGCGGTTCGCTGTGGGAGGCGCGGTGTGGGAGGCGCGTGG 660
DB 761603 TCATGGGCGCCAAACATGACGCGCAGGCGGTTCGCTGTGGGAGGCGCGGTGTGGGAGGCGCGTGG 761662

QY 661 TGGGACCGGATGAGTGTGCGCGCGCGATCGACGCGG 699
DB 761663 TGGGACCGGATGAGTGTGCGCGCGCGATCGACGCGG 761701

RESULT 4
US-08-313-185-57
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; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-313-185-57

Query Match      79.2%; Score 558.2; DB 2; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.7e-101;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

QY 1 CCCAGGAGCTGGAGGCGATCAACCGCAGACCCCTGATCAACATCGTCCAGTCTGTGGCGG 60
DB 1124 CCCAGGAGCTGGAGGCGATCAACCGCAGACCGCTGATCAATATCGTCCGCTGTGGCGG 1183

QY 61 CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGCCAGTTCATGACCAAGCAACCCCGC 120
DB 1184 CTATCAAGAAATTCCTTCGGCACCAGCCAGCTGTGCGAGTTTCATGATCAGAACACCCCTC 1243

QY 121 TGTGGGCTCAACCAAGCGCGCTGTTCGGCGCTGGCGCGGTGTGTCTGTCCCGGG 180
DB 1244 TGTGGGCTTACCCACAAAGCGCGGTGTTCGGCGCTGGCGCGGTGTGTGTGTGTGTGTGTGT 1303

QY 181 AGCGGGCGGCTGGAGTTCGCGACGCTGCAACCGTCCCACTAGCGCGGATGTCCCGGA 240
DB 1304 AGCGTCCGGCTAGAGGTTCGTCAGCTGACCCCTTCGACTACGCGCGGATGTCCCGGA 1363

QY 241 TCGAGACCCCGAGGTCCTCAACATCGTCTGATCGGCTCGCTGTGCGGTGTATGCGCGG 300
DB 1364 TCGAGACTCCGGAGGGGCCGAACATAGGTCTGATCGGTTCATTCGCGTGTACGCGCGG 1423

QY 301 TCAACCCCTTCGGGTTCATCGAGACCGCTACCGCAAGGTGTGACGCGGTGTGTCACCG 360
DB 1424 TCAACCCCTTCGGGTTCATCGAAGACCGTACCGCAAGGTGTGACGCGGTGTGTCACCG 1483
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QY 361 ACAGATCCACTACCTGACCGCCGACGAGGAGACCGCCACCTGCTGGCGCAGGCCAACT 420
Db 1484 ACAGATCGAATATTGACCGCTGACGAGGAGACCGCCATGCTGGCGCAGGCCAACT 1543
QY 421 CGCCGATCAGCAGCAAGGCGCGTTCGCGAGGCGCGGTGCTGGTCCGCGCAAGCGG 480
Db 1544 CGCCGATCAGCAGGCGCGCGTTCGCGAGGCGCGGTGCTGGTCCGCGCAAGCGG 1603
QY 481 GCGAGGTGCGAGTACGTCGCCCTCGTCGAGGTGGAATACATGACGATGCTGCGCCGCGCAGA 540
Db 1604 GCGAGGTGCGAGTACGTCGCCCTCGTCGAGGTGGAATACATGACGATGCTGCGCCGCGCAGA 1663
QY 541 TGGTGTGCGTGGCCACCGGATGATCCGTTCTCGAGCAGCAGCAGCCAACTGTCGCC 600
Db 1664 TGGTGTGCGTGGCCACCGGATGATCCGTTCTCGAGCAGCAGCAGCCAACTGTCGCC 1723
QY 601 TGATGGCGCGCAACATGACGCGCAGCGGTTCGCTGGTGGCGAGGCGCGCTGG 660
Db 1724 TGATGGCGCGTACATGCGCGCCAGCGGTTCGTTGGTGGCGAGGCGCGCTGG 1783
QY 661 TGGGCAACCGCATGAGCTGCGCGCGCGCGATCGACGCGG 699
Db 1784 TGGGTACCGGTATGGAGTTGGCGCGCGCCATCGACGCTG 1822

RESULT 5

US-09-082-614A-57
; Sequence 57, Application US/09082614A
; Patent No. 6124098

GENERAL INFORMATION:

; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESSEE: Dunner
; STREET: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315

COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/082,614A
; FILING DATE:

CLASSIFICATION:

; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/313,185
; FILING DATE: 12-OCT-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356.0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ. ID. NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single

; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-09-082-614A-57

Query Match 79.2%; Score 558.2; DB 3; Length 3447;
Best Local Similarity 87.4%; Pred. No. 1.7e-101;
Matches 611; Conservative 0; Mismatches 88; Indels 0; Gaps 0;

QY 1 CCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCAGTGTGGCGG 60
Db 1124 CCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAATATCCGTCGCGTGGTGGCGG 1183
QY 61 CGATCAGAGATTCTTCGGCACCAGCAGCTGCCAGTTCATGGACCAACAACCCGC 120
Db 1184 CTATCAGGAATTTCTTCGGCACCAGCAGCTGCCAGTTCATGGATCAGAACACCCCTC 1243
QY 121 TGTGCGGGGCTCACCCCAAGCGCGCTGTGGCGCTGGGCGCGGGTGTGTTCTGCCGGG 180
Db 1244 TGTGCGGGGCTCACCCCAAGCGCGCTGTGGCGCTGGGCGCGGGTGTGTTCTGCCGGT 1303
QY 181 AGCGGGCGGGCTGGAGGTCGCGCAGCTGACCCCGTCCACTACGCGCGGATGTGCCGA 240
Db 1304 AGCGTCCGGGCTAGAGGTCGCTGACCTTCGCACTACGCGCGGATGTGCCGA 1363
QY 241 TCGAGACCCCGAGGGTCCCAACATCGTCTGATCGCTCGCTGTGTCGCTGTATGCGCGG 300
Db 1364 TCGAGACTCGGAGGGCGCGAATAGTCTGATCGGTTTCTGTCGCTGTATGCGCGGG 1423
QY 301 TCAACCCGTTGCGGTTTCATCGAGACCCGTAACCGAAGTGGTTCGACGGCGTGTACCG 360
Db 1424 TCAACCCGTTGCGGTTTCATCGAACAACCCGTACCGCAAGTGGTTCGACGGTGTGTCAGCG 1483
QY 361 ACAGATCACAATCTGACCGCGCAGGAGGAGACCGCCACGTCGTCGCGCAGGCCAACT 420
Db 1484 ACAGATCGAATCTTGACCGCTGACGAGGAGACCGCCATGTCGTGGCGCAGGCCAACT 1543
QY 421 CGCGGATCGACGACAAGGCGCGTTCGCGAGGCGCGGGTGTGTCGCGCGCAAGCGG 480
Db 1544 CGCGGATCGACGAGCGCGCGCTTCCTCGAGCGCGCGGTGTTGGTGTGCGCGCAAGCGG 1603
QY 481 GCGAGTTCGAGTACGTCGCCCTCGTCGAGGTGGAATACATGACGTCGTGCGCGCGCAGA 540
Db 1604 GCGAGTTCGAGTACGTCGCCCTCGTCGAGGTGGAATACATGATGTCGTCGCGCAGCGCAGA 1663
QY 541 TGGTGTGCGTGGCCACCGGATGATCCGTTCTCGAGCAGCAGCAGCCAACTGTCGCC 600
Db 1664 TGGTGTGCGTGGCCACAGCGATGATTCCGTTCTTGAGCAGCAGCAGCCAACTGTCGCC 1723
QY 601 TGATGGCGCGCAACATGACGCGCGCGGTTCCGCTGGTGGCGAGGCGCGCGCTGG 660
Db 1724 TGATGGCGCGTACATGCGCGCCAGCGGTTCGTTGGTGGCGAGGCGCGCGCTGG 1783
QY 661 TGGGCAACCGCATGAGGTCGCGCGCGCGGATCGACGCGG 699
Db 1784 TGGGTACCGGTATGGAGTTGGCGCGCGCCATCGACGCTG 1822

RESULT 6

US-08-250-030-1
; Sequence 1, Application US/08250030
; Patent No. 5643723

GENERAL INFORMATION:

; APPLICANT: Persing, David H.
; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in
; TITLE OF INVENTION: Clinical Specimens
; NUMBER OF SEQUENCES: 15
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Schwegman, Lundberg & Woessner
; STREET: 3500 IDS Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA

ZIP: 55402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/250,030
FILING DATE: 26-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Muetting, Ann M.
REGISTRATION NUMBER: 33,977
REFERENCE/DOCKET NUMBER: 150.105US1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-339-0331
TELEFAX: 612-339-3061
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 970 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
US-08-250-030-1

Query Match 76.7%; Score 540.4; DB 1; Length 970;
Best Local Similarity 91.1%; Pred. No. 5.1e-98;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 1 CCCAGACGTGAGGCGATCACACGCGACAGCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db |||||
QY 61 CGATCAAGAGTCTTCGGCACAGCAGCTGTCCAGTTTCATGACCAACAAACCCGC 120
Db |||||
QY 401 CGATCAAGAGTCTTCGGCACAGCAGCTGTCCAGTTTCATGACCAACAAACCCGC 460
Db |||||
QY 121 TGTGGGGTTCACCCACAGCCGCTGTCCGCGCTGGCGCTGGCGCTGGCGCTGGCGCTGGCG 180
Db |||||
QY 461 TGTGGGGTTCACCCACAGCCGCTGTCCGCGCTGGCGCTGGCGCTGGCGCTGGCGCTGGCG 520
Db |||||
QY 181 AGCGGCGCGGCTGGAGTTCGCGACCGCTACCCGCTCCCACTACGCGCGGATGCGCGA 240
Db |||||
QY 521 AGCGTCCGCGGCTGGAGTTCGCGACCGCTACCCGCTCCCACTACGCGCGGATGCGCGA 580
Db |||||
QY 241 TCGAGACCCCGAGGCTCCCAACATCGCTCTGATCGGCTGGCGCTGGCGCTGGCGCTGGCG 300
Db |||||
QY 581 TCGAAACCCCTGAGGGGCCCAACATCGCTCTGATCGGCTGGCGCTGGCGCTGGCGCTGGCG 640
Db |||||
QY 301 TCAACCCGCTTCGGGTTTCATCGAGACCGCTACCGCAAGGTGCTACGCGCTGGTACCG 360
Db |||||
QY 641 TCAACCCGCTTCGGGTTTCATCGAAACCGCGTACCGCAAGGTGCTACGCGCTGGTACCG 700
Db |||||
QY 361 ACAGATCCACTACTCGACCGCGAGGAGGACCGCACTGCTGTGCGCGAGGCGCAACT 420
Db |||||
QY 701 ACAGATCGTGTACTCGACCGCGAGGAGGACCGCACTGCTGTGCGCGAGGCGCAACT 760
Db |||||
QY 421 CGCGATCGACGACAGGGCGGCTTCGCGAGGCGGCGGCTGCTGCTCCGCGCGAGGCGG 480
Db |||||
QY 761 CGCGATCGATCGCGACGCTGCTGCTGCGAGCGCGGCTGCTGCTGCTGCTGCTGCTGCTG 820
Db |||||
QY 481 CGAGGTTCGAGTACGTCGCTCGCGAGGAGGAGTACATGAGCTGTGCGCGCGCGAG 540
Db |||||
QY 821 CGAGGTTCGAGTACGTCGCTCGCTGCTGAGGAGGAGTACATGAGCTGTGCGCGCGCGAG 880
Db |||||
QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCCCAACGCTGCC 600
Db |||||
QY 881 TGGTGTGGTGGCCACCGCGATGATTCCTTCCTGGAGCAGCAGCAGCCCAACGCTGCC 940
Db |||||
QY 601 TGATGGGGCCCAACATGACGCGCGAGGCGG 630
Db |||||
QY 941 TCATGGGGCCCAACATGACGCGCGAGGCGG 970
Db |||||

RESULT 7
PCT-US95-06790-1
Sequence 1, Application PC/TUS9506790
GENERAL INFORMATION:
APPLICANT: Mayo Foundation for Medical Education and Research
APPLICANT: and Hoffmann-La Roche Inc.
TITLE OF INVENTION: Detection of a Genetic Locus Encoding
TITLE OF INVENTION: Resistance to Rifampin
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: Schwegman, Lundberg & Woessner
STREET: 3500 IDS Center
CITY: Minneapolis
STATE: MN
COUNTRY: USA
ZIP: 55402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/06790
FILING DATE: 26-MAY-1995
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Raasch, Kevin W.
REGISTRATION NUMBER: 35,651
REFERENCE/DOCKET NUMBER: 150.105WO1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-339-0331
TELEFAX: 612-339-3061
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 970 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
PCT-US95-06790-1

Query Match 76.7%; Score 540.4; DB 5; Length 970;
Best Local Similarity 91.1%; Pred. No. 5.1e-98;
Matches 574; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 1 CCCAGACGTGAGGCGATCACACGCGACAGCCCTGATCAACATCCGTCAGTCGTGGCGG 60
Db |||||
QY 341 CCCAGACGTGAGGCGATCACACGCGACAGCTTGATCAACATCCGCGCTGGTGTGCGCG 400
Db |||||
QY 61 CGATCAAGAGTCTTCGGCACAGCAGCTGTCCAGTTTCATGACCAACAAACCCGC 120
Db |||||
QY 401 CGATCAAGAGTCTTCGGCACAGCAGCTGTCCAGTTTCATGACCAACAAACCCGC 460
Db |||||
QY 121 TGTGGGGTTCACCCACAGCCGCTGTCCGCGCTGGCGCTGGCGCTGGCGCTGGCGCTGGCG 180
Db |||||
QY 461 TGTGGGGTTCACCCACAGCCGCTGTCCGCGCTGGCGCTGGCGCTGGCGCTGGCGCTGGCG 520
Db |||||
QY 181 AGCGGCGCGGCTGGAGTTCGCGACCGCTACCCGCTCCCACTACGCGCGGATGCGCGA 240
Db |||||
QY 521 AGCGTCCGCGGCTGGAGTTCGCGACCGCTACCCGCTCCCACTACGCGCGGATGCGCGA 580
Db |||||
QY 241 TCGAGACCCCGAGGCTCCCAACATCGCTCTGATCGGCTGGCGCTGGCGCTGGCGCTGGCG 300
Db |||||
QY 581 TCGAAACCCCTGAGGGGCCCAACATCGCTCTGATCGGCTGGCGCTGGCGCTGGCGCTGGCG 640
Db |||||
QY 301 TCAACCCGCTTCGGGTTTCATCGAGACCGCTACCGCAAGGTGCTACGCGCTGGTACCG 360
Db |||||
QY 641 TCAACCCGCTTCGGGTTTCATCGAAACCGCGTACCGCAAGGTGCTACGCGCTGGTACCG 700
Db |||||
QY 361 ACAGATCCACTACTCGACCGCGAGGAGGACCGCACTGCTGTGCGCGAGGCGCAACT 420
Db |||||

Db 701 ACAGATCGTGACCGCGGACGAGGAGGACCGACGCTGGTGGACAGGCCAAATT 760
 QY 421 CGCCGATCGACGAAAGGCGCGGTTCGCGAGGCGCGGGTGTGTCGCGCGGCGGCGG 480
 Db 761 CGCCGATCGATGCGGAGCGGTCTCGTTCGAGCGCGCGGTGTGTCGCGCGGCGG 820
 QY 481 GCAGGTGAGTACGTCGCTCGTTCGAGGTGAGTACATGAGGAGTGTGCGCGCGG 540
 Db 821 GCAGGTGAGTACGTCGCTCGTTCGAGGTGAGTACATGAGGAGTGTGCGCGCGG 880
 QY 541 TGCTGTCGTCGCGGACCGCGATGATCCCGTTCCTCGAGGACGAGCGGCGGCGG 600
 Db 881 TGCTGTCGTCGCGGACCGCGATGATCCCGTTCCTCGAGGACGAGCGGCGGCGG 940
 QY 601 TGATGCGCGCAACATGCGAGCGGCGG 630
 Db 941 TCATGCGGCGCAACATGCGAGCGGCGG 970

RESULT 8
 US-08-757-653-135
 ; Sequence 135, Application US/08757653
 ; Patent No. 5843669
 ; GENERAL INFORMATION:
 ; APPLICANT: Kaiser, Michael W.
 ; APPLICANT: Lyamichev, Victor I.
 ; APPLICANT: Lyamichev, Natasha
 ; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
 ; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
 ; NUMBER OF SEQUENCES: 190
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Medlen & Carroll, LLP
 ; STREET: 220 Montgomery Street, Suite 2200
 ; CITY: San Francisco
 ; STATE: California
 ; COUNTRY: United States Of America
 ; ZIP: 94104
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/757,653
 ; FILING DATE:
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Ingolia, Diane E.
 ; REGISTRATION NUMBER: 40,027
 ; REFERENCE/DOCKET NUMBER: FORS-02565
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 705-8410
 ; TELEFAX: (415) 397-8338
 ; INFORMATION FOR SEQ ID NO: 135:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 620 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: double
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: DNA (genomic)
 ; US-08-757-653-135

Query Match 75.2%; Score 530.4; DB 2; Length 620;
 Best Local Similarity 91.0%; Pred. No. 4.6e-96;
 Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAATCCGTCAGTCTGCGGCGGATCAAGAGTCTTCGCGACCGAGCGAGTGTCC 95
 Db 1 ATCAATCCGTCAGTCTGCGGCGGATCAAGAGTCTTCGCGACCGAGCGAGTGTCC 60
 QY 96 CAGTTCATGGACCAAGAAACCCGCTGTGCGGGGCTACCCCAAGCGGCGCTGTGCGGG 155
 Db 61 CAATTCATGGACCAAGAAACCCGCTGTGCGGGGTTGACCCCAAGCGGCGAGTGTGCGGG 120

QY 156 CTGGGCGCGGTGCTGTCTGTCGCGGAGCGGCGCGGTGCGAGGTCCGCGACGTGSCACCG 215
 Db 121 CTGGGCGCGGTGCTGTCTGTCAGCTGAGCGTGCCTGGGCTGAGGTCCGCGACGTGACCG 180
 QY 216 TCCACTACGCGCGGATGTCGCGATCGAGACCCCGAGGAGTCCCAACATCGGTCTGATC 275
 Db 181 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCGCAACATCGGTCTGATC 240
 QY 276 GGTCTGCTGTCGTCGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGG 335
 Db 241 GGTCTGCTGTCGTCGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGG 300
 QY 336 AAGTGTGTCGACGCGGTGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGG 395
 Db 301 AAGTGTGTCGACGCGGTGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGG 360
 QY 396 CGCCACGTGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGG 455
 Db 361 CGCCACGTGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGG 420
 QY 456 CGGTGTCGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGG 515
 Db 421 CGGTGTCGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGG 480
 QY 516 TACATGACGTGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGG 575
 Db 481 TACATGACGTGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGG 540
 QY 576 GAGCACGACGACGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGG 635
 Db 541 GAGCACGACGACGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGGTCGCGG 600
 QY 636 CTGGTGCAGCGGAGGCGG 655
 Db 601 CTGGTGCAGCGGAGGCGG 620

RESULT 9
 US-08-757-653-138/c
 ; Sequence 138, Application US/08757653
 ; Patent No. 5843669
 ; GENERAL INFORMATION:
 ; APPLICANT: Kaiser, Michael W.
 ; APPLICANT: Lyamichev, Victor I.
 ; APPLICANT: Lyamichev, Natasha
 ; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
 ; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
 ; NUMBER OF SEQUENCES: 190
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Medlen & Carroll, LLP
 ; STREET: 220 Montgomery Street, Suite 2200
 ; CITY: San Francisco
 ; STATE: California
 ; COUNTRY: United States Of America
 ; ZIP: 94104
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/757,653
 ; FILING DATE:
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Ingolia, Diane E.
 ; REGISTRATION NUMBER: 40,027
 ; REFERENCE/DOCKET NUMBER: FORS-02565
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 705-8410
 ; TELEFAX: (415) 397-8338
 ; INFORMATION FOR SEQ ID NO: 138:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 620 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: double
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: DNA (genomic)
 ; US-08-757-653-138

Query Match 75.2%; Score 530.4; DB 2; Length 620;
 Best Local Similarity 91.0%; Pred. No. 4.6e-96;
 Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAATCCGTCAGTCTGCGGCGGATCAAGAGTCTTCGCGACCGAGCGAGTGTCC 95
 Db 1 ATCAATCCGTCAGTCTGCGGCGGATCAAGAGTCTTCGCGACCGAGCGAGTGTCC 60
 QY 96 CAGTTCATGGACCAAGAAACCCGCTGTGCGGGGCTACCCCAAGCGGCGCTGTGCGGG 155
 Db 61 CAATTCATGGACCAAGAAACCCGCTGTGCGGGGTTGACCCCAAGCGGCGAGTGTGCGGG 120

SEQUENCE CHARACTERISTICS:
 LENGTH: 620 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 US-08-757-653-138

Query Match 75.2%; Score 530.4; DB 2; Length 620;
 Best Local Similarity 91.0%; Pred. No. 4.6e-96;
 Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTGTGGCGGATCAAGAGGATCTTCGGACACGACGAGTGTCC 95
 Db 620 ATCAACATCCGCGCGGTGTGCGCGGATCAAGAGGATCTTCGGACACGACGAGTGTCC 561
 QY 96 CAGTTCATGGACCAAGCAACCGCTGTGGGGCTCACCAAAAGCGCCCTGTGGCG 155
 Db 560 CAATTATGGACCAAGCAACCGCTGTGGGGCTCACCAAAAGCGCCCTGTGGCG 501
 QY 156 CTGGGCGCGGCGTGTGTCGGGAGCGCGCGGCTGGAGTCCGCGACGTGACCCG 215
 Db 500 CTGGGCGCGGCGTGTGTCAGTGGCGGTGCGGGCTGGAGTCCGCGACGTGACCCG 441
 QY 216 TCCCACTACGCGCGATGTGCGCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
 Db 440 TCGCACTACGCGCGATGTGCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381
 QY 276 GGCTCGTGTGGGTGTGTCGGCGGTCAACCGCTTCGGGTTCATCGAGACGCGTACCGC 335
 Db 380 GGCTCGTGTGGGTGTGTCGGCGGTCAACCGCTTCGGGTTCATCGAGACGCGTACCGC 321
 QY 336 AAGTGTGTGCGCGGTGTGTCACCAAGAGTCCACTACCTGACCGCGACGAGGAGAC 395
 Db 320 AAGTGTGTGCGCGGTGTGTCACCAAGAGTCCACTACCTGACCGCGACGAGGAGAC 261
 QY 396 CGCCAGTGTGGCGAGGCAACATCGCGGATCGAGACCAAGGGCGGTTCCGCGAGGCC 455
 Db 260 CGCCAGTGTGGCGAGGCAACATCGCGGATCGAGACCAAGGGCGGTTCCGCGAGGCC 201
 QY 456 CGGTGTGTGTCGGCGCAAGCGGCGAGGTTCAGTACGTGCGTTCGAGGTGGAC 515
 Db 200 CGGTGTGTGTCGGCGCAAGCGGCGAGGTTCAGTACGTGCGTTCGAGGTGGAC 141
 QY 516 TACATGACGTGTCGGCGCGAGTGTGTCGGCGCGCAACATGCGCGCGAGCGGTTCGG 635
 Db 140 TACATGACGTGTCGGCGCGAGTGTGTCGGCGCGCAACATGCGCGCGAGCGGTTCGG 81
 QY 576 GAGCAGCAGCGCAACCGTCCCTGATGGCGCGCAACATGCGCGCGAGCGGTTCGG 635
 Db 80 GAGCAGCAGCGCAACCGTCCCTGATGGCGCGCAACATGCGCGCGAGCGGTTCGG 21
 QY 636 CTGGTGGCAGCGAGGCGCC 655
 Db 20 CTGGTGGCAGCGAGGCGCC 1

RESULT 10

US-08-520-946-135
 ; Sequence 135, Application US/08520946
 ; Patent No. 6372424
 ; GENERAL INFORMATION:
 ; APPLICANT: BROW, MARY ANN D.
 ; APPLICANT: LYAMICHEV, VICTOR I.
 ; APPLICANT: OLIVE, DAVID M.
 ; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
 ; TITLE OF INVENTION: PATHOGENS
 ; NUMBER OF SEQUENCES: 160
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: MEDLEN & CARROLL
 ; STREET: 220 MONTGOMERY STREET, SUITE 2200
 ; CITY: SAN FRANCISCO
 ; STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA
 ZIP: 94104
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/520,946
 FILING DATE:
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: CARROLL, PETER G.
 REGISTRATION NUMBER: 32,837
 REFERENCE/DOCKET NUMBER: FORS-01756
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 135:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 620 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: double
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 US-08-520-946-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;
 Best Local Similarity 91.0%; Pred. No. 4.6e-96;
 Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCAGTGTGGCGGATCAAGAGGATCTTCGGACACGACGAGTGTCC 95
 Db 1 ATCAACATCCGCGCGGTGTGCGCGGATCAAGAGGATCTTCGGACACGACGAGTGTCC 60
 QY 96 CAGTTCATGGACCAAGCAACCGCTGTGGGGCTCACCAAAAGCGCCCTGTGGCG 155
 Db 61 CAATTATGGACCAAGCAACCGCTGTGGGGCTCACCAAAAGCGCCCTGTGGCG 120
 QY 156 CTGGGCGCGGCGTGTGTCGGGAGCGCGCGGCTGGAGTCCGCGACGTGACCCG 215
 Db 121 CTGGGCGCGGCGTGTGTCAGTGGCGGTGCGGGCTGGAGTCCGCGACGTGACCCG 180
 QY 216 TCCCACTACGCGCGATGTGCGCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
 Db 181 TCGCACTACGCGCGATGTGCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
 QY 276 GGCTCGTGTGGGTGTGTCGGCGGTCAACCGGTTCGGGTTCATCGACACGCGTACCGC 335
 Db 241 GGCTCGTGTGGGTGTGTCGGCGGTCAACCGGTTCGGGTTCATCGAAACCGCGTACCGC 300
 QY 336 AAGTGTGTGCGACGCGGTGTGTCACGAGATCCACTACCTGACCGCGAGGAGGAC 395
 Db 301 AAGTGTGTGCGACGCGGTGTGTCAGCGAGATCGTGTACCTGACCGCGAGGAGGAC 360
 QY 396 CGCCAGTGTGGCGAGGCAACTCGCGGATCGACCAAGGGCGCGGTTCGCGAGGCGC 455
 Db 361 CGCCAGTGTGGCGAGGCAACTCGCGGATCGATCGGACGCGTTCGTCGAGCGC 420
 QY 456 CGGTGTGTGTCGGCGCGAGGCGCGGCGAGTCCAGTACGTGCCCTGTGTCGAGGTGAC 515
 Db 421 CGGTGTGTGTCGGCGCGAGGCGCGGCGAGTCCAGTACGTGCCCTGTGTCGAGGTGAC 480
 QY 516 TACATGACGTGTGCGCGCGAGATGTGTCGGTGGCCACCGCGATGATCCCGTTCCTC 575
 Db 481 TACATGACGTGTGCGCGCGAGATGTGTCGGTGGCCACCGCGATGATTCCTCTCTG 540
 QY 576 GAGCAGCAGCGCAACCGTCCCTGATGGCGCGCAACATGACGCGCGAGCGGTTCGG 635
 Db 541 GAGCAGCAGCGCAACCGTCCCTGATGGCGCGCAACATGACGCGCGAGCGGTTCGG 600
 QY 636 CTGGTGGCAGCGAGGCGCC 655
 Db 636 CTGGTGGCAGCGAGGCGCC 655

Db 601 CTGGTCCGTAGCGAGGCCCC 620

RESULT 11

US-08-520-946-138/c

; Sequence 138, Application US/08520946

; Patent No. 6372424

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; APPLICANT: LYAMICHEV, VICTOR I.

; APPLICANT: OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; TITLE OF INVENTION: PATHOGENS

; NUMBER OF SEQUENCES: 160

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/520,946

; FILING DATE:

; CLASSIFICATION: 435

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: single

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

US-08-520-946-138

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 4.6e-96;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCAGTCGGCGGCGATCAAGAGTTCTTCGGCACCAGCCAGCTGTCC 95

Db 620 ATCAACATCCGCGCGGTGGTCCGCGCATCAAGAGTTCTTCGGCACCAGCCAGCTGAGC 561

Qy 96 CAGTTTCATGACAGAACACCCCTGTGCGGGCTCACCCACAGCGCGCTGTCCGGG 155

Db 560 CAATTCATGACAGAACACCCCTGTGCGGGTTGACCCACAGCGCGGACTGTCCGG 501

Qy 156 CTGGCGCGGGTGTCTGTCTCCCGGAGCGCGCGGTGGAGGTCCGCGACGTGCACCCG 215

Db 500 CTGGCGCGCGGTGTCTGTACAGTGAGCGTCCGCGGTGGAGGTCCGCGACGTGCACCCG 441

Qy 216 TCCCACTACGCGCGGTGTCCGATCGAGACCCGCGAGGTCCCAACATCGTCTGATC 275

Db 440 TCGCACTACGCGCGGTGTCCGATCGAAACCCCTGAGGGGCGCAACATCGTCTGATC 381

Qy 276 GGCTTCGCTGTGCGGTGTATCGCGGTCAACCGGTTCGGGTTCATCGAGACCCCGTACCGC 335

Db 380 GGCTTCGCTGTGCGGTGTATCGCGGTCAACCGGTTCGGGTTCATCGAAACCCCGTACCGC 321

Qy 336 AAGTGTGTCGACGGCGTGTGTCACCGACGAGATCCACTACCTGACCGCGCAGAGAGGAC 395

Db 320 AAGTGTGTCGACGGCGTGTGTCAGCGACGAGATCGTGTACTGTGACCGCGCAGAGAGGAC 261

Qy 396 CGCCAGTGTGTGGCGCAGGCAACTCCCGATCGACCAAGGGCGGTTTCGGCGAGGCC 455

Db 260 CGCCAGTGTGTGGCGCAGGCAACTTCGCCGATCGATCGGACGTCGTCGTCGAGCGC 201

Qy 456 CGGGTGTGTGGTCCGCGCAAGCGCGGCGAGGTGAGTACGTGCGCTCCGCGAGGTGGAC 515

Db 200 CGGTGTGTGTGGTCCGCGCAAGCGCGGCGAGGTGAGTACGTGCGCTCCGTCGAGGTGGAC 141

Qy 516 TACATGAGTGTGCGCGCGCGCGAGATGGTGTGGTGGCCACCGCGATGATCCCGTTCCCTC 575

Db 140 TACATGAGTGTGCGCGCGCGCGAGATGGTGTGGTGGCCACCGCGATGATCCCGTTCCCTC 81

Qy 576 GAGCAGCAGCAGCCCAACCGTGCCTGATGGGCGCCCAACATGACAGCGCCAGGGGTTCCG 635

Db 80 GAGCAGCAGCAGCCCAACCGTGCCTGATGGGCGCCCAACATGACAGCGCCAGGGGTTCCG 21

Qy 636 CTGGTCCGAGCGAGCGCC 655

Db 20 CTGGTCCGTAGCGAGGCCCC 1

RESULT 12

US-09-655-378A-135

; Sequence 135, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; APPLICANT: LYAMICHEV, VICTOR I.

; APPLICANT: OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; TITLE OF INVENTION: PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 135:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 135:

US-09-655-378A-135

Query Match 75.2%; Score 530.4; DB 4; Length 620;

Best Local Similarity 91.0%; Pred. No. 4.6e-96;

Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGTCAGTCGGCGGCGATCAAGAGTTCTTCGGCACCAGCCAGCTGTCC 95

Db 1 ATCAACATCCGCGCGGTGGTCCGCGCATCAAGAGTTCTTCGGCACCAGCCAGCTGAGC 60


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QY 96 CAGTTTCATGACAGAAACACCGCTGTCGGGCTCACCCACAAGCGCCCTGTGCGG 155
Db 61 CAATTATGACAGAAACACCGCTGTCGGGCTGACCCACAAGCGCGACTGTGCGG 120
QY 156 CTGGGCGCGGCTGTGTCGTCGGGAGCGCGGCTGAGGTCCGCGACGTGACCGG 215
Db 121 CTGGGCGCGGCTGTGTCGTCGAGCGTCCGCGGCTGAGGTCCGCGACGTGACCGG 180
QY 216 TCCCACTACGCGCGATGTCGCGATCGAGACCCCGAGGGTCCCAATCGGTCTGATC 275
Db 181 TGCACACTACGCGCGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
QY 276 GCGTCGCTGTCGCTGATGTCGCGGCTCAACCGGTTTCGCGTTCATCGAGCGCGTACCG 335
Db 241 GCGTCGCTGTCGCTGATGTCGCGGCTCAACCGGTTTCGCGTTCATCGAAACCGCTACCG 300
QY 336 AAGTGTGTCGAGCGGTGTGTCGCGGCTACCGACGAGATCCACTGACCGCGGACGAGGAG 395
Db 301 AAGTGTGTCGAGCGGTGTGTCGAGCGAGATCGGTGACCTGACCGCGGACGAGGAG 360
QY 396 CGCACGCTGTCGCGGAGCGCAACTCGCGGATCGAGGACAAAGGCGCGGTTCGCGGAGCG 455
Db 361 CGCACGCTGTCGCGGAGCGCAACTCGCGGATCGAGGACAAAGGCGCGGTTCGCGGAGCG 420
QY 456 CGGTGCTGTCGCTGTCGCGGAGCGGAGTTCGAGTTCGCTGTCGCGGAGCGGTCGCTTCG 515
Db 421 CGGTGCTGTCGCTGTCGCGGAGCGGAGTTCGAGTTCGCTGTCGCGGAGCGGTCGCTTCG 480
QY 516 TACATGACGTGTCGCGGCGAGATGTCGTCGTCGCGGACCGCGATGATCCCGTTCCTC 575
Db 481 TACATGACGTGTCGCGGCGAGATGTCGTCGTCGCGGACCGCGATGATTCCTTCCTG 540
QY 576 GAGCAGCAGCAGCGCAACCGTCCCTGATGCGCGCAACATGCGCGCGCGCGGCGTTCG 635
Db 541 GAGCAGCAGCAGCGCAACCGTCCCTGATGCGCGCAACATGCGCGCGCGCGGCGTTCG 600
QY 636 CTGTGTCGCGAGCGGCGCC 655
Db 601 CTGTGTCGAGGAGGCCCC 620

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RESULT 13

US-09-655-378A-138/c
; Sequence 138, Application US/09655378A
; Patent No. 6673616

GENERAL INFORMATION:

APPLICANT: BROW, MARY ANN D.
OLIVE, DAVID M.
TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
PATHOGENS
NUMBER OF SEQUENCES: 165
CORRESPONDENCE ADDRESS:
ADDRESSEE: MEDLEN & CARROLL
STREET: 220 MONTGOMERY STREET, SUITE 2200
CITY: SAN FRANCISCO
STATE: CALIFORNIA
COUNTRY: UNITED STATES OF AMERICA
ZIP: 94104

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
FILING DATE: 05-Sep-2000
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: CARROLL, PETER G.
REGISTRATION NUMBER: 32,837
REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 138:

SEQUENCE CHARACTERISTICS:

LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)

SEQUENCE DESCRIPTION: SEQ ID NO: 138:
US-09-655-378A-138

Query Match

Best Local Similarity 75.2%; Score 530.4; DB 4; Length 620;
Matches 564; Conservative 0; Mismatches 56; Indels 0; Gaps 0;

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QY 36 ATCAACATCCGTCAGTCTGTCGGCGGATCAAGGAGTTCCTCGGCACCAAGCTGTC 95
Db 620 ATCAACATCCGTCAGTCTGTCGGCGGATCAAGGAGTTCCTCGGCACCAAGCTGTC 95
QY 96 CAGTTTCATGACAGAAACACCGCTGTCGGGCTCACCCACAAGCGCCCTGTGCGG 155
Db 560 CAATTATGACAGAAACACCGCTGTCGGGCTGACCCACAAGCGCGACTGTGCGG 501
QY 156 CTGGGCGCGGCTGTGTCGTCGGGAGCGCGGCTGAGGTCCGCGACGTGACCGG 215
Db 500 CTGGGCGCGGCTGTGTCGTCGAGCGTTCGCGGCTGAGGTCCGCGACGTGACCGG 441
QY 216 TCCCACTACGCGCGATGTCGCGGATCGAGACCCCGAGGGTCCCAATCGGTCTGATC 275
Db 440 TCGCACTACGCGCGATGTCGCGGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381
QY 276 GCGTCGCTGTCGCTGATGTCGCGGCTCAACCGGTTTCGCGTTCATCGAGACCGCTACCG 335
Db 380 GCGTCGCTGTCGCTGATGTCGCGGCTCAACCGGTTTCGCGTTCATCGAAACCGCTACCG 321
QY 336 AAGTGTGTCGAGCGGTGTGTCGCGGATCGAGATCCACTGACCGCGGACGAGGAG 395
Db 320 AAGTGTGTCGAGCGGTGTGTCGAGATCGATCTGTCGCGGACCGCGGAGGAG 261
QY 396 CGCACGCTGTCGCGGAGCGCAACTCGCGGATCGAGCAAGGGCGCGGTTCGCGAGGCG 455
Db 260 CGCACGCTGTCGCGGAGCGCAACTCGCGGATCGAGCAAGGGCGCGGTTCGTCGAGCG 201
QY 456 CGGTGCTGTCGCTGTCGCGGAGCGGAGTTCGAGTACGTGCGCTCGTCGAGGTGAC 515
Db 200 CGGTGCTGTCGCTGTCGCGGAGCGGAGTTCGAGTACGTGCGCTCGTCGAGGTGAC 141
QY 516 TACATGACGTGTCGCGGCGGATGTCGTCGTCGCGGACCGCGATGATCCCGTTCCTC 575
Db 140 TACATGACGTGTCGCGGCGGATGTCGTCGTCGCGGACCGCGATGATTCCTTCCTG 81
QY 576 GAGCAGCAGCAGCGCAACCGTCCCTGATGCGCGCCCAACATGCGCGCGCGGTTCCG 635
Db 80 GAGCAGCAGCAGCGCAACCGTCCCTGATGCGCGCCCAACATGCGCGCGCGGTTCCG 635
QY 636 CTGTGTCGCGAGCGGCGCC 655
Db 20 CTGTGTCGAGGAGGCCCC 1

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RESULT 14

US-08-757-653-136
; Sequence 136, Application US/08757653
; Patent No. 5843669

GENERAL INFORMATION:

APPLICANT: Kaiser, Michael W.
APPLICANT: Lyamichev, Victor I.
APPLICANT: Lyamichev, Natasha
TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
NUMBER OF SEQUENCES: 190

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CORRESPONDENCE ADDRESS:
ADDRESSEE: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 136:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-136

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 9.4e-96;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAATCCGTCAGTCGCGGGCGGATCAAGAGTCTTCGGCACCCAGCGAGTCTCC 95
DB 1 ATCAATCCGCGCGGTGGTCCGCGGATCAAGAGTCTTCGGCACCCAGCGAGTCTCC 60
QY 96 CAGTTCATGACCAAGAACCAACCCGCTGTCGGGGCTACCCACAGAGGTCCTGCGG 155
DB 61 CAATTTCATGACCAAGAACCAACCCGCTGTCGGGGTGTACCCACAGAGGTCCTGCGG 120
QY 156 CTGGGCGCGGTGCTGTCTCCGGGAGCGGCGGCTGGAGGTCCTGCGGAGCTGCACCG 215
DB 121 CTGGGCGCGGCTGTCTGTCAGTGTGCGGGTCCGGGTCCTGCGGAGCTGCACCG 180
QY 216 TCCCACTACGCGCGGATGTGCCGATCAGAGACCCGCGAGGGTCCCAACATCGTGTATC 275
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QY 276 GCCTCGCTGTGCTGTATGCGGGTCAACCCGTTCCGGTTTCATCGAGAGCGCGTACCG 335

CORRESPONDENCE ADDRESS:
ADDRESSEE: Medlen & Carroll, LLP
STREET: 220 Montgomery Street, Suite 2200
CITY: San Francisco
STATE: California
COUNTRY: United States Of America
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/757,653
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Ingolia, Diane E.
REGISTRATION NUMBER: 40,027
REFERENCE/DOCKET NUMBER: FORS-02565
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 137:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-137

Query Match 75.0%; Score 528.8; DB 2; Length 620;
Best Local Similarity 90.8%; Pred. No. 9.4e-96;
Matches 563; Conservative 0; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAATCCGTCAGTCGCGGGCGGATCAAGAGTCTTCGGCACCCAGCGAGTCTCC 95
DB 1 ATCAATCCGCGCGGTGGTCCGCGGATCAAGAGTCTTCGGCACCCAGCGAGTCTCC 60
QY 96 CAGTTCATGACCAAGAACCAACCCGCTGTCGGGGCTACCCACAGAGGTCCTGCGG 155
DB 61 CAATTTCATGACCAAGAACCAACCCGCTGTCGGGGTGTACCCACAGAGGTCCTGCGG 120
QY 156 CTGGGCGCGGTGCTGTCTCCGGGAGCGGCGGCTGGAGGTCCTGCGGAGCTGCACCG 215
DB 121 CTGGGCGCGGCTGTCTGTCAGTGTGCGGGTCCGGGTCCTGCGGAGCTGCACCG 180
QY 216 TCCCACTACGCGCGGATGTGCCGATCAGAGACCCGCGAGGGTCCCAACATCGTGTATC 275
DB 181 TCGCACTACGCGCGGATGTGCCGATCGAAACCCCTGAGGGGCGCAACATCGTGTATC 240
QY 276 GCCTCGCTGTGCTGTATGCGGGTCAACCCGTTCCGGTTTCATCGAGAGCGCGTACCG 335
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Db 241 GGCTCGCTGTCGGTGTACGCGCGGCTCAACCCGTTCCGGTTTCATCGAAACGCGTACCGC 300
 QY 336 AAGGTGTCGACGGCGTGGTCAACCGAGATCCACTACCTACCGCCGACGAGGAGAC 395
 Db 301 AAGGTGGTCGACGGCGTGGTGGCGGAGATCGGTACCTGACCGCCGACGAGGAGAC 360
 QY 396 CGCCACGTGGTGGCGAGGCCAACTCGCCGATCGACGCAAGGGCGCGTTCCGCGAGGCC 455
 Db 361 CGCCACGTGGTGGCACAGGCCAAATTCGCCGATCGATCGGACGGTCGCTTCGTCGAGCCG 420
 QY 456 CGGTGTCGTCCCGCCGCAAGCGCGGCGAGGTGCGAGTACGTCCCTCGTCCGAGGTGGAC 515
 Db 421 CGCGTCTGTCTCCGCCGCAAGCGCGGCGAGGTGAGTACGTGCCCTCGTCTGAGGTGGAC 480
 QY 516 TACATGGACGTGTCCCGCGCCAGATGGTGTGGTGGCCACCGCGATGATCCCGTTCCTC 575
 Db 481 TACATGGACGTCTCGCCCGCCGAGATGGTGTGGTGGCCACCGCGATGATTCCTTCCTG 540
 QY 576 GAGCACGACGACGCCCAACCGTCCCTGATGGCGGCCCAACATGACGCGCCAGCGCGTTCGG 635
 Db 541 GAGCACGACGACGCCCAACCGTCCCTCATGGGGCAACATGACGCGCCAGCGCGTTCGG 600
 QY 636 CTGTTGGCAGCGAGCGGCC 655
 Db 601 CTGTTCCGTAGCGAGGCCCC 620

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 14:25:11 ; Search time 407.972 Seconds
(without alignments)
8498.468 Million cell updates/sec

Title: US-09-285-306-9
Perfect score: 705
Sequence: 1 ccagagcgtgagcgatc.....ggcgatcgagcgcgagcgt 705

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 3228839 seqs, 245606551 residues

Total number of hits satisfying chosen parameters: 6457678

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

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Database : Published Applications NA:*

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- 2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
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- 12: /cgn2_6/ptodata/1/pubpna/US09_NEW_PUB.seq:*
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- 19: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	705	100.0	705	9	US-09-285-306-5
3	705	100.0	705	9	US-09-285-306-6
4	705	100.0	705	9	US-09-285-306-7
5	705	100.0	705	9	US-09-285-306-8
6	705	100.0	705	9	US-09-285-306-9
7	705	100.0	705	9	US-09-285-306-12
8	705	100.0	705	9	US-09-285-306-13
9	705	100.0	705	9	US-09-285-306-14
10	705	100.0	705	9	US-09-285-306-16
11	705	100.0	705	9	US-09-285-306-24
12	703.4	99.8	705	9	US-09-285-306-17
13	695	98.6	705	9	US-09-285-306-3
14	693.4	98.4	705	9	US-09-285-306-11

15	691	98.0	705	9	US-09-285-306-10	Sequence 10, Appl
16	691	98.0	3444	13	US-10-282-122A-25737	Sequence 25737, A
17	687	97.4	687	9	US-09-285-306-18	Sequence 18, Appl
18	687	97.4	687	9	US-09-285-306-19	Sequence 19, Appl
19	687	97.4	687	9	US-09-285-306-20	Sequence 20, Appl
20	687	97.4	687	9	US-09-285-306-21	Sequence 21, Appl
21	687	97.4	687	9	US-09-285-306-22	Sequence 22, Appl
22	687	97.4	687	9	US-09-285-306-23	Sequence 23, Appl
23	687	97.4	687	9	US-09-285-306-25	Sequence 25, Appl
24	687	97.4	687	9	US-09-285-306-27	Sequence 27, Appl
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27	655.4	93.0	705	9	US-09-285-306-87	Sequence 87, Appl
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ALIGNMENTS

RESULT 1
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; Sequence 4, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Giergas, Thomas
; APPLICANT: Drenkow, Jorg
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285.306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 4
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-4

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Best Local Similarity		100.0%;	Pred. No. 2.1e-154;		
Matches		705;	Conservative	0;	Mismatches 0; Indels 0; Gaps 0;
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Db	1	CCAGGAGTGGAGGCGATCACACCGAGCCCTGATCAACATCCGTCAGTCCGTGGCGG	60		
Qy	61	CGATCAAGAGTTCCTTCGGCACCCAGGAGTGTCCAGTTCATGACCAACACCGC	120		
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Db	121	TGTCGGGGCTCACCCACAGCGCGGCTGTCCGGGCTGGCGGTGTGTGTCCCGG	180		

QY	181	ACGGGCGGGGCTGGAGGTCCCGACGTGCAACCCGTCACCTACGCGCGGATGTGCCCGA	240
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QY	241	TCGAGACCCCGAGGGTCCCAACATCGTCTCATCGGCTCGTCTCGGTGTATGCGCGG	300
Db	241	TCGAGACCCCGAGGGTCCCAACATCGTCTCATCGGCTCGTCTCGGTGTATGCGCGG	300
QY	301	TCAAACCCGTTCCGGTTTCATCGAGACCCCTACCGCAAGGTGGTCGACGGCGGTGCACCG	360
Db	301	TCAAACCCGTTCCGGTTTCATCGAGACCCCTACCGCAAGGTGGTCGACGGCGGTGCACCG	360
QY	361	ACGAGATCCACTACCTGACCGCGGACGAGAGGACCGCCACGCTGGTGGCGAGGCCAACT	420
Db	361	ACGAGATCCACTACCTGACCGCGGACGAGAGGACCGCCACGCTGGTGGCGAGGCCAACT	420
QY	421	CGCGGATCCAGCAAGGCGCGGTTCCGCGAGGCGCGGGTGTGCTCCGCGCAAGCGG	480
Db	421	CGCGGATCCAGCAAGGCGCGGTTCCGCGAGGCGCGGGTGTGCTCCGCGCAAGCGG	480
QY	481	GCAGGTTCGAGTACGTGCGCTTCGCGAGGTGACTACATGACGTGTCCGCGCGCAGA	540
Db	481	GCAGGTTCGAGTACGTGCGCTTCGCGAGGTGACTACATGACGTGTCCGCGCGCAGA	540
QY	541	TGCTGTTCGTTGGCCACCGGATGATCCCGTTCTTCGAGACGACGACGCCAACCGTGCCC	600
Db	541	TGCTGTTCGTTGGCCACCGGATGATCCCGTTCTTCGAGACGACGACGCCAACCGTGCCC	600
QY	601	TGATGGCGCCACATGACGCGCGCGGTTCCGCTGGTTCGCGAGGCGCGCTGG	660
Db	601	TGATGGCGCCACATGACGCGCGCGGTTCCGCTGGTTCGCGAGGCGCGCTGG	660
QY	661	TGGCACCCGCGATGGAGCTCGCGCGCGCGATTCGACGCGCGGACGT	705
Db	661	TGGCACCCGCGATGGAGCTCGCGCGCGCGATTCGACGCGCGGACGT	705
RESULT 2			
US-09-285-306-5			
; Sequence 5, Application US/09285306A			
; Publication No. US20020187467A1			
; GENERAL INFORMATION:			
; APPLICANT: Gingeras, Thomas			
; APPLICANT: Drenkow, Jorg			
; APPLICANT: Affymetrix, Inc.			
; TITLE OF INVENTION: Mycobacterial rpoB Sequences			
; FILE REFERENCE: 018547-018570US			
; CURRENT APPLICATION NUMBER: US/09/285.306A			
; CURRENT FILING DATE: 1998-04-02			
; EARLIER APPLICATION NUMBER: US 60/080.616			
; EARLIER FILING DATE: 1998-04-03			
; NUMBER OF SEQ ID NOS: 181			
; SOFTWARE: FastSeq for Windows Version 3.0			
; SEQ ID NO 5			
; LENGTH: 705			
; TYPE: DNA			
; ORGANISM: Mycobacterium avium			
US-09-285-306-5			
Query Match			
Best Local Similarity 100.0%; Score 705; DB 9; Length 705;			
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;			
QY	1	CCCAGGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCGTCCAGTCCGTGGCGG	60
Db	1	CCCAGGAGCTGGAGGCGATCACACCGCAGACCCCTGATCAACATCGTCCAGTCCGTGGCGG	60
QY	61	CGATCAAGAGTCTTTCGGCACCGACGAGCTGTCCAGTTTCATGGACAGACAAACCGCG	120
Db	61	CGATCAAGAGTCTTTCGGCACCGACGAGCTGTCCAGTTTCATGGACAGACAAACCGCG	120
QY	121	TGTCGGGCTCACCCACAAGCGCCGCTGTTCGGGCTGGCGCGCGGTGTCTGTCCCGGG	180

QY 121 TGTGGGGCTCACCCACAAAGCGCCCTGTGCGGCGCTGGGCGCGGTGCTGTCCCGGG 180
 Db 121 TGTGGGGCTCACCCACAAAGCGCCCTGTGCGGCGCTGGGCGCGGTGCTGTCCCGGG 180
 QY 181 AGCGGGCGGGCTGGAGTCCGACGCTGACCGTCCCTGACCTACGCGCGGATGTCGCCGA 240
 Db 181 AGCGGGCGGGCTGGAGTCCGACGCTGACCGTCCCTGACCTACGCGCGGATGTCGCCGA 240
 QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGGTGTATGCGGGG 300
 Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGGTGTATGCGGGG 300
 QY 301 TCAACCGGTTCCGGTTCATCGAGACCGCGTACCAGGAGGTGTCAGCGGCTGTACCG 360
 Db 301 TCAACCGGTTCCGGTTCATCGAGACCGCGTACCAGGAGGTGTCAGCGGCTGTACCG 360
 QY 361 ACAGATCCACTACTGACCGCCGACGAGGAGGACCGCACTGCTGGTGGCGAGGCCAACT 420
 Db 361 ACAGATCCACTACTGACCGCCGACGAGGAGGACCGCACTGCTGGTGGCGAGGCCAACT 420
 QY 421 CGCGCATCGACGACAAAGGGCGGTTCCGAGGCGCCGGTGTGTCGCGCGCAAGGCGG 480
 Db 421 CGCGCATCGACGACAAAGGGCGGTTCCGAGGCGCCGGTGTGTCGCGCGCAAGGCGG 480
 QY 481 GCGAGTTCAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGCTGTGCGCGGCCAGA 540
 Db 481 GCGAGTTCAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGCTGTGCGCGGCCAGA 540
 QY 541 TGGTGTGGTGGCGCAACATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 600
 Db 541 TGGTGTGGTGGCGCAACATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 600
 QY 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 660
 Db 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 660
 QY 661 TGGGACCGGATGGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705
 Db 661 TGGGACCGGATGGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705

RESULT 4
 US-09-285-306-7
 ; Sequence 7, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gengeras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER FILING DATE: 1999-04-03
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 7
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-7

Query Match 100.0%; Score 705; DB 9; Length 705;
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CCCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
 Db 1 CCCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
 QY 61 CGATCAAGGAGTTCTTCGGCACCCAGCAGCTGCCAGTTTCATGGACCAACACCCGCG 120

Db 61 CGATCAAGGAGTTCTTCGGCACCCAGCAGCTGCCAGTTTCATGGACCAACACCCGCG 120
 QY 121 TGTGGGGCTCACCCACAAAGCGCCCTGTGCGGCGCTGGGCGCGGTGCTGTCCCGGG 180
 Db 121 TGTGGGGCTCACCCACAAAGCGCCCTGTGCGGCGCTGGGCGCGGTGCTGTCCCGGG 180
 QY 181 AGCGGGCGGGCTGGAGTCCGACGCTGACCGTCCCTGACCTACGCGCGGATGTCGCCGA 240
 Db 181 AGCGGGCGGGCTGGAGTCCGACGCTGACCGTCCCTGACCTACGCGCGGATGTCGCCGA 240
 QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGGTGTATGCGGGG 300
 Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTCGGTGTATGCGGGG 300
 QY 301 TCAACCGGTTCCGGTTCATCGAGACCGCGTACCAGGAGGTGTCAGCGGCTGTACCG 360
 Db 301 TCAACCGGTTCCGGTTCATCGAGACCGCGTACCAGGAGGTGTCAGCGGCTGTACCG 360
 QY 361 ACAGATCCACTACTGACCGCCGACGAGGAGGACCGCACTGCTGGTGGCGAGGCCAACT 420
 Db 361 ACAGATCCACTACTGACCGCCGACGAGGAGGACCGCACTGCTGGTGGCGAGGCCAACT 420
 QY 421 CGCGCATCGACGACAAAGGGCGGTTCCGAGGCGCCGGTGTGTCGCGCGCAAGGCGG 480
 Db 421 CGCGCATCGACGACAAAGGGCGGTTCCGAGGCGCCGGTGTGTCGCGCGCAAGGCGG 480
 QY 481 GCGAGTTCAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGCTGTGCGCGGCCAGA 540
 Db 481 GCGAGTTCAGTACGTGCGCTCGTCCGAGGTGGACTACATGACGCTGTGCGCGGCCAGA 540
 QY 541 TGGTGTGGTGGCGCAACATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 600
 Db 541 TGGTGTGGTGGCGCAACATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 600
 QY 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 660
 Db 601 TGATGGGCGCCAAATGACGCGCCAGGCGGTTCCGCTGGTGGCGAGGCGCGCTGG 660
 QY 661 TGGGACCGGATGGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705
 Db 661 TGGGACCGGATGGAGCTGCGCGCGGCGATCGACGCGGCGACGT 705

RESULT 5
 US-09-285-306-8
 ; Sequence 8, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gengeras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER FILING DATE: 1999-04-03
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 8
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-8

Query Match 100.0%; Score 705; DB 9; Length 705;
 Best Local Similarity 100.0%; Pred. No. 2.1e-154;
 Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CCCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60
 Db 1 CCCAGAGCTGGAGGCGATCACACCGAGACCCCTGATCAACATCCGTCAGTCGTGGCGG 60

QY	1	CC	CAGGAGCTG	AGGCGGATCA	CCG	CAGAGCCCTG	ATCAACATCCGT	CAAGTCAGT	CGTGGCGG	60
Db	1	CC	CAGGAGCTG	AGGCGGATCA	CCG	CAGAGCCCTG	ATCAACATCCGT	CAAGTCAGT	CGTGGCGG	60
QY	61	CG	ATCAGGAGTTC	TCGGGAC	CAGCGAC	GTGCCAGTT	CATCGAC	CAGACAC	CCCGC	120
Db	61	CG	ATCAGGAGTTC	TCGGGAC	CAGCGAC	GTGCCAGTT	CATCGAC	CAGACAC	CCCGC	120
QY	121	TG	TCGGGGCTCA	CCCAAG	CGCGCCTG	TCGGGCGCTGGG	CCCGG	TGTCGT	CCCCGG	180
Db	121	TG	TCGGGGCTCA	CCCAAG	CGCGCCTG	TCGGGCGCTGGG	CCCGG	TGTCGT	CCCCGG	180
QY	181	AG	CGGGCGGGCT	GAGGTCGG	GAGCGTG	GCACCGG	TCCCACTAC	CGGCGGAT	TGTCGCCGA	240
Db	181	AG	CGGGCGGGCT	GAGGTCGG	GAGCGTG	GCACCGG	TCCCACTAC	CGGCGGAT	TGTCGCCGA	240
QY	241	TC	GAGACCCCG	GAGGGTCC	CAACATCG	GTCTGATCG	GCTCGTGT	GCATGCGCGG	300	
Db	241	TC	GAGACCCCG	GAGGGTCC	CAACATCG	GTCTGATCG	GCTCGTGT	GCATGCGCGG	300	
QY	301	TC	AACCGGTT	CGGTTTCAT	CGAGACG	CGCTACCG	CAAGTG	TGTCGACG	CGTGTGCACG	360
Db	301	TC	AACCGGTT	CGGTTTCAT	CGAGACG	CGCTACCG	CAAGTG	TGTCGACG	CGTGTGCACG	360
QY	361	AC	GAGATCCACT	ACTGAC	CGCCGAC	GAGGAGCCG	CCACGTGT	GTCGCGCAGG	CCA	420
Db	361	AC	GAGATCCACT	ACTGAC	CGCCGAC	GAGGAGCCG	CCACGTGT	GTCGCGCAGG	CCA	420
QY	421	CG	CGATCGAC	GAACAAG	GGCGGGTTCGG	CGGAGGCGCGG	TGTCGT	TCGCGCAAG	GCGG	480
Db	421	CG	CGATCGAC	GAAGAAG	GGCGGGTTCGG	CGGAGGCGCGG	TGTCGT	TCGCGCAAG	GCGG	480
QY	481	GC	GAGTCGAGTA	CGTGCC	CTCGTCG	GAGTGGACTA	CATG	GACGTGTG	CGCGCGCAGA	540
Db	481	GC	GAGTCGAGTA	CGTGCC	CTCGTCG	GAGTGGACTA	CATG	GACGTGTG	CGCGCGCAGA	540
QY	541	TG	TGTCG	TGGCCAC	CGGATGATCCG	GTTCCTCG	AGCAGAC	CAACCCG	TGCC	600
Db	541	TG	TGTCG	TGGCCAC	CGGATGATCCG	GTTCCTCG	AGCAGAC	CAACCCG	TGCC	600
QY	601	TG	ATGGGCG	CAACATG	CAGCGCC	AGGCGGTTCCG	CTGTGCG	CAGGCGCG	CGCTGG	660
Db	601	TG	ATGGGCG	CAACATG	CAGCGCC	AGGCGGTTCCG	CTGTGCG	CAGGCGCG	CGCTGG	660
QY	661	TG	GCA	CCGGCATG	GAGTCG	CGCGCGG	CGATCG	ACGCGG	GACGT	705
Db	661	TG	GCA	CCGGCATG	GAGTCG	CGCGCGG	CGATCG	ACGCGG	GACGT	705

RESULT 8

US-09-285-306-13
; Sequence 13, Application US/09285306A
; Publication No. US20020187467A1

: PUBLICATION NO: 0320
: GENERAL INFORMATION:

APPLICANT: Gingers Thomas

APPLICANT: Drenkow, Tara

; APPLICANT: Drenkow, Jorg

APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Seq

FILE REFERENCE: 018547-018570US

FILE REFERENCE: 010347-01037003
; CURRENT APPLICATION NUMBER: US/09/285,306A

CURRENT AFFILIATION NUMBER: US/05/263,506A
: CURRENT FILING DATE: 1999-04-02

; CURRENT FILING DATE: 1999-04-02
 : EARLIER APPLICATION NUMBER: US 60/080 676

EARLIER APPLICATION NUMBER: US 60/080,616
EARLIER FILING DATE: 1998 04 03

EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

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; SOFTWARE: FastSEQ for Windows Version 3.0

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; SEQ ID NO 13

; LENGTH: 705

; LENGTH: 703
: TYPE: DNA

Query Match 100.0%; Score 705; DB 9; Length 705;

[illegible]

RESULT 9

RESULT 9
IIS-09-285-306-14

US-09-285-306-14
Continuation of Application No. 09/009530A

; Sequence 14, Application US/092

; Publication No. US20

; GENERAL INFORMATION:

APPLICANT: Gingeras, Thomas

APPLICANT: Drenkow, Jorg

APPLICANT: DRENKOW, JORG
APPLICANT: Affymetrix Inc

APPLICANT: Attymetrix, Inc.

010547 01055070
; TITLE OF INVENTION: Mycobacterial rpoB Seq

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/

; CURRENT FILING DATE: 1999-04-02

EARLIER APPLICATION NUMBER

EARLIER FILING DATE: 1998-04-03
EARLIER AFFIDAVIT NUMBER: US 00/080,010

;; EARTIER FILING DATE: 1998
: NUMBER OF SEC ID NOS: 181

; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Win

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; SOFTWARE: FastSEQ for Windows

```

; SEQ ID NO 14

LENGTH: 705

```

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGATCACACCGAGAGCCCTGTATCAACATCCGTCAGTCCGAGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGATCACACCGAGAGCCCTGTATCAACATCCGTCAGTCCGAGTGGCGG 60

Qy 61 CGATCAAGAGGATCTTTCGGACACAGCCAGTGTCCCGAGTTCATGGACAGAAACCCGC 120
Db 61 CGATCAAGAGGATCTTTCGGACACAGCCAGTGTCCCGAGTTCATGGACAGAAACCCGC 120

Qy 121 TGTGGGGCTCACCCACAAGCGCGCTGTGGGAGCTGGGCGGGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCGCTGTGGGAGCTGGGCGGGGTCTGTCCCGGG 180

Qy 181 AGCGGGCGGGCTGGAGTCCGCGACGTGCAACCGTCCCACTACGGCGGATGTGCCGA 240
Db 181 AGCGGGCGGGCTGGAGTCCGCGACGTGCAACCGTCCCACTACGGCGGATGTGCCGA 240

Qy 241 TCAGAGCCCGGAGGTTCCCAACATCGTCTGATCGGCTCGCTGTATCGCGGG 300
Db 241 TCAGAGCCCGGAGGTTCCCAACATCGTCTGATCGGCTCGCTGTATCGCGGG 300

Qy 301 TCAACCCGTTTCGGGTTTCATCGAGAGCGCTGACCAAGGTGGTTCGACGGGTGTACCG 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGAGCGCTGACCAAGGTGGTTCGACGGGTGTACCG 360

Qy 361 ACAGATCCACTACTCTGACCGCGAGGAGGACCCCGAGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTCTGACCGCGAGGAGGACCCCGAGTGGTGGCGAGGCCAACT 420

Qy 421 CGCGGATCGAGCAAGGCGCGGTTTCGGAGGCGCGGTTCTGGTTCGGCGCAAGCGG 480
Db 421 CGCGGATCGAGCAAGGCGCGGTTTCGGAGGCGCGGTTCTGGTTCGGCGCAAGCGG 480

Qy 481 GCAGGTCGAGTACGTCCCTCGTCCGAGGTGGACTACATGGAGTCTCGCGCGCCAGA 540
Db 481 GCAGGTCGAGTACGTCCCTCGTCCGAGGTGGACTACATGGAGTCTCGCGCGCCAGA 540

Qy 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGCAACCGTCC 600
Db 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGCAACCGTCC 600

Qy 601 TGATGGCGCCCAACATCGAGCGCGGTTCCGCTGGTTCGGAGCGAGCGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATCGAGCGCGGTTCCGCTGGTTCGGAGCGAGCGCGCGCTGG 660

Qy 661 TGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705
Db 661 TGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705

```

```

RESULT 10
US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Drenkow, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; LENGTH: 705
; TYPE: DNA

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; ORGANISM: Mycobacterium avium
US-09-285-306-16

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGATCACACCGAGAGCCCTGTATCAACATCCGTCAGTCCGAGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGATCACACCGAGAGCCCTGTATCAACATCCGTCAGTCCGAGTGGCGG 60

Qy 61 CGATCAAGAGGATCTTTCGGACACAGCCAGTGTCCCGAGTTCATGGACAGAAACCCGC 120
Db 61 CGATCAAGAGGATCTTTCGGACACAGCCAGTGTCCCGAGTTCATGGACAGAAACCCGC 120

Qy 121 TGTGGGGCTCACCCACAAGCGCGCTGTGGGAGCTGGGCGGGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCCACAAGCGCGCTGTGGGAGCTGGGCGGGGTCTGTCCCGGG 180

Qy 181 AGCGGGCGGGCTGGAGTCCGCGACGTGCAACCGTCCCACTACGGCGGATGTGCCGA 240
Db 181 AGCGGGCGGGCTGGAGTCCGCGACGTGCAACCGTCCCACTACGGCGGATGTGCCGA 240

Qy 241 TCAGAGCCCGGAGGTTCCCAACATCGTCTGATCGGCTCGCTGTATCGCGGG 300
Db 241 TCAGAGCCCGGAGGTTCCCAACATCGTCTGATCGGCTCGCTGTATCGCGGG 300

Qy 301 TCAACCCGTTTCGGGTTTCATCGAGAGCGCTGACCAAGGTGGTTCGACGGGTGTACCG 360
Db 301 TCAACCCGTTTCGGGTTTCATCGAGAGCGCTGACCAAGGTGGTTCGACGGGTGTACCG 360

Qy 361 ACAGATCCACTACTCTGACCGCGAGGAGGACCCCGAGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTCTGACCGCGAGGAGGACCCCGAGTGGTGGCGAGGCCAACT 420

Qy 421 CGCGGATCGAGCAAGGCGCGGTTTCGGAGGCGCGGTTCTGGTTCGGCGCAAGCGG 480
Db 421 CGCGGATCGAGCAAGGCGCGGTTTCGGAGGCGCGGTTCTGGTTCGGCGCAAGCGG 480

Qy 481 GCAGGTCGAGTACGTCCCTCGTCCGAGGTGGACTACATGGAGTCTCGCGCGCCAGA 540
Db 481 GCAGGTCGAGTACGTCCCTCGTCCGAGGTGGACTACATGGAGTCTCGCGCGCCAGA 540

Qy 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGCAACCGTCC 600
Db 541 TGTGTCTGGTGGCCACCGCGATGATCCCGTTCCTCGAGACGACGACGCAACCGTCC 600

Qy 601 TGATGGCGCCCAACATCGAGCGCGGTTCCGCTGGTTCGGAGCGAGCGCGCGCTGG 660
Db 601 TGATGGCGCCCAACATCGAGCGCGGTTCCGCTGGTTCGGAGCGAGCGCGCGCTGG 660

Qy 661 TGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705
Db 661 TGGCACCGCATGGAGCTGCGCGCGCGATCGACGCGGCGAGCT 705

```

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RESULT 11
US-09-285-306-24
; Sequence 24, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Drenkow, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24

```

```
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-24

Query Match      100.0%; Score 705; DB 9; Length 705;
Best Local Similarity 100.0%; Pred. No. 2.1e-154;
Matches 705; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGCATCACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGCATCACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60

Qy 61 CGATCAAGGAGTTCTTGGGACACGACCCAGCTGTCCAGTTTCATGACACGACCAACCCGC 120
Db 61 CGATCAAGGAGTTCTTGGGACACGACCCAGCTGTCCAGTTTCATGACACGACCAACCCGC 120

Qy 121 TGTGGGGCTCACCAACGCGCCCTGTGGGGCTGGGGCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCAACGCGCCCTGTGGGGCTGGGGCCGGGTGGTCTGTCCCGGG 180

Qy 181 AGCGGGCCGGGCTGGAGTCCGCGACGTGACCCCGTCCCACTACGGCCGGATGTCCCGGA 240
Db 181 AGCGGGCCGGGCTGGAGTCCGCGACGTGACCCCGTCCCACTACGGCCGGATGTCCCGGA 240

Qy 241 TCGAGACCCCGGAGGTCCTGAGTCCGCGACGTGACCCCGTCCCACTACGGCCGGATGTCCCGGG 300
Db 241 TCGAGACCCCGGAGGTCCTGAGTCCGCGACGTGACCCCGTCCCACTACGGCCGGATGTCCCGGG 300

Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTCCAGCGGTGGTTCACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTCCAGCGGTGGTTCACCG 360

Qy 361 ACAGATCCACTACTCTGACCCCGCAGGAGGACCGCCACGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTCTGACCCCGCAGGAGGACCGCCACGTGGTGGCGAGGCCAACT 420

Qy 421 CGCGATCGACGACAAAGGGCCGGTTCGCGAGGCGCCGGTGGTTCGCGCGCAAGGGCGG 480
Db 421 CGCGATCGACGACAAAGGGCCGGTTCGCGAGGCGCCGGTGGTTCGCGCGCAAGGGCGG 480

Qy 481 GCGAGTCCAGTACGTGCGCTCTCGAGGTGGACTACATGACGTGCGCGCGCCAGA 540
Db 481 GCGAGTCCAGTACGTGCGCTCTCGAGGTGGACTACATGACGTGCGCGCGCCAGA 540

Qy 541 TGGTGTGGTGGCCACCGCATGATCCCGTTCTCGAGCAGCAGCAGCCAAACCGTGCCC 600
Db 541 TGGTGTGGTGGCCACCGCATGATCCCGTTCTCGAGCAGCAGCAGCCAAACCGTGCCC 600

Qy 601 TGATGGGCGCAACATGACGCGCAGGCGGTTCCGCTGGTGGCAGCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCAACATGACGCGCAGGCGGTTCCGCTGGTGGCAGCGAGGCGCGCTGG 660

Qy 661 TGGGACCGGATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
Db 661 TGGGACCGGATGAGCTGCGCGCGCGATCGACGCGCGACGT 705

RESULT 12
US-09-285-306-17
; Sequence 17, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

Query Match      99.8%; Score 703.4; DB 9; Length 705;
Best Local Similarity 99.9%; Pred. No. 4.9e-154;
Matches 704; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 CCCAGGACGTGGAGCGCATCACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGCATCACCGCAGACCCCTGATCAACATCCGTCCAGTCGTGGCGG 60

Qy 61 CGATCAAGGAGTTCTTGGGACACGACCCAGCTGTCCAGTTTCATGACACGACCAACCCGC 120
Db 61 CGATCAAGGAGTTCTTGGGACACGACCCAGCTGTCCAGTTTCATGACACGACCAACCCGC 120

Qy 121 TGTGGGGCTCACCAACGCGCCCTGTGGGGCTGGGGCCGGGTGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTCACCAACGCGCCCTGTGGGGCTGGGGCCGGGTGGTCTGTCCCGGG 180

Qy 181 AGCGGGCCGGGCTGGAGTCCGCGACGTGACCCCGTCCCACTACGGCCGGATGTCCCGGA 240
Db 181 AGCGGGCCGGGCTGGAGTCCGCGACGTGACCCCGTCCCACTACGGCCGGATGTCCCGGA 240

Qy 241 TCGAGACCCCGGAGGTCCTGAGTCCGCGACGTGACCCCGTCCCACTACGGCCGGATGTCCCGGG 300
Db 241 TCGAGACCCCGGAGGTCCTGAGTCCGCGACGTGACCCCGTCCCACTACGGCCGGATGTCCCGGG 300

Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTCCAGCGGTGGTTCACCG 360
Db 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGGTCCAGCGGTGGTTCACCG 360

Qy 361 ACAGATCCACTACTCTGACCCCGCAGGAGGACCGCCACGTGGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACTCTGACCCCGCAGGAGGACCGCCACGTGGTGGCGAGGCCAACT 420

Qy 421 CGCGATCGACGACAAAGGGCCGGTTCGCGAGGCGCCGGTGGTTCGCGCGCAAGGGCGG 480
Db 421 CGCGATCGACGACAAAGGGCCGGTTCGCGAGGCGCCGGTGGTTCGCGCGCAAGGGCGG 480

Qy 481 GCGAGTCCAGTACGTGCGCTCTCGAGGTGGACTACATGACGTGCGCGCGCCAGA 540
Db 481 GCGAGTCCAGTACGTGCGCTCTCGAGGTGGACTACATGACGTGCGCGCGCCAGA 540

Qy 541 TGGTGTGGTGGCCACCGCATGATCCCGTTCTCGAGCAGCAGCAGCCAAACCGTGCCC 600
Db 541 TGGTGTGGTGGCCACCGCATGATCCCGTTCTCGAGCAGCAGCAGCCAAACCGTGCCC 600

Qy 601 TGATGGGCGCAACATGACGCGCAGGCGGTTCCGCTGGTGGCAGCGAGGCGCGCTGG 660
Db 601 TGATGGGCGCAACATGACGCGCAGGCGGTTCCGCTGGTGGCAGCGAGGCGCGCTGG 660

Qy 661 TGGGACCGGATGAGCTGCGCGCGCGATCGACGCGCGACGT 705
Db 661 TGGGACCGGATGAGCTGCGCGCGCGATCGACGCGCGACGT 705

RESULT 13
US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
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; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: Fast-SEQ for Windows Version 3.0
; SEQ ID NO 3
;   LENGTH: 705
;   TYPE: DNA
;   ORGANISM: Mycobacterium avium
;   FEATURE:
;   NAME/KEY: modified base
;   LOCATION: (525)...(525)
;   OTHER INFORMATION: n = g,a,c or t
;   FEATURE:
;   NAME/KEY: modified base
;   LOCATION: (650)...(650)
;   OTHER INFORMATION: n = g,a,c or t
US-09-285-306-3

Query Match      98.6%; Score 695; DB 9; Length 705;
Best Local Similarity 98.6%; Pred. No. 4.3e-152;
Matches 695; Conservative 4; Mismatches 6; Indels 0; Gaps 0;

Qy 1  CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCCGTCCAGTGTGGCGG 60
Db 1  CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCCGTCCAGTGTGGCGG 60
Qy 61  CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCCAAGTTTCATGGACCCAGAACACCCGC 120
Db 61  CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCCAAGTTTCATGGACCCAGAACACCCGC 120
Qy 121  TGTGGGGGTTCACCCAAAGCGCGCTGTGGGGTGTGGCCCGGGGTGTGTCTGTCCCGGG 180
Db 121  TGTGGGGGTTCACCCAAAGCGCGCTGTGGGGTGTGGCCCGGGGTGTGTCTGTCCCGGG 180
Qy 181  AGCGGCGGGGTGGAGGTCCCGACGTGACCGGTCCCTACCGTCCCTACCGTCCCTACCGTCCCT 240
Db 181  AGCGGCGGGGTGGAGGTCCCGACGTGACCGGTCCCTACCGTCCCTACCGTCCCTACCGTCCCT 240
Qy 241  TCAGAGACCCCGGAGGTGCCAAACATCGGTCTGTATCGGTCTGTATCGGTCTGTATCGGTCTGT 300
Db 241  TCAGAGACCCCGGAGGTGCCAAACATCGGTCTGTATCGGTCTGTATCGGTCTGTATCGGTCTGT 300
Qy 301  TCAGAGACCCCGGAGGTGCCAAACATCGGTCTGTATCGGTCTGTATCGGTCTGTATCGGTCTGT 360
Db 301  TCAGAGACCCCGGAGGTGCCAAACATCGGTCTGTATCGGTCTGTATCGGTCTGTATCGGTCTGT 360
Qy 361  ACCAGATCCACTACCTACCGGACGAGGAGGACCGCCACGTCGTGGTGGTGGTGGTGGTGGTGGT 420
Db 361  ACCAGATCCACTACCTACCGGACGAGGAGGACCGCCACGTCGTGGTGGTGGTGGTGGTGGTGGT 420
Qy 421  CGCGGATCGACGACGAGGCGCGTTCGGGAGGCGCGGTTCGGTGGTGGTGGTGGTGGTGGTGGTGG 480
Db 421  CGCGGATCGACGACGAGGCGCGTTCGGGAGGCGCGGTTCGGTGGTGGTGGTGGTGGTGGTGGTGG 480
Qy 481  GCGAGTTCGAGTACGTGCTTCGTTCGAGTGGACTACATGGACGTGTGTGTGTGTGTGTGTGTGTGT 540
Db 481  GCGAGTTCGAGTACGTGCTTCGTTCGAGTGGACTACATGGACGTGTGTGTGTGTGTGTGTGTGTGT 540
Qy 541  TGGTGTGCGTGGCCACCGGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGCAGCAGCAGCAGC 600
Db 541  TGGTGTGCGTGGCCACCGGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGCAGCAGCAGCAGC 600
Qy 601  TGATGGCGCCAAACATGCGAGCGCCAGCGGTTCGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 660
Db 601  TGATGGCGCCAAACATGCGAGCGCCAGCGGTTCGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 660
Qy 661  TGGGACCGGATGAGAGTGTGGCGCGCGCGATGCGAGCGCGCGAGCT 705
Db 661  TGGGACCGGATGAGAGTGTGGCGCGCGCGATGCGAGCGCGCGAGCT 705
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RESULT 14

US-09-285-306-11

; Sequence 11, Application US/09285306A

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; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: GINGERAS, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: Fast-SEQ for Windows Version 3.0
; SEQ ID NO 11
;   LENGTH: 705
;   TYPE: DNA
;   ORGANISM: Mycobacterium avium
;   FEATURE:
;   NAME/KEY: modified base
;   LOCATION: (42)...(42)
;   OTHER INFORMATION: n = g,a,c or t
;   FEATURE:
;   NAME/KEY: modified base
;   LOCATION: (692)...(692)
;   OTHER INFORMATION: n = g,a,c or t
US-09-285-306-11
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Query Match      98.4%; Score 693.4; DB 9; Length 705;
Best Local Similarity 98.9%; Pred. No. 1e-151;
Matches 697; Conservative 0; Mismatches 8; Indels 0; Gaps 0;

Qy 1  CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCCGTCCAGTGTGGCGG 60
Db 1  CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCCGTCCCGTGTGGCGG 60
Qy 61  CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCCAAGTTTCATGGACCCAGAACACCCGC 120
Db 61  CGATCAAGGAGTTCTTCGGCACCAGCCAGCTGTCCCAAGTTTCATGGACCCAGAACACCCGC 120
Qy 121  TGTGGGGGTTCACCCAAAGCGCGCTGTGGGGTGTGGCCCGGGGTGTGTCTGTCTCCGGG 180
Db 121  TGTGGGGGTTCACCCAAAGCGCGCTGTGGGGTGTGGCCCGGGGTGTGTCTGTCTCCGGG 180
Qy 181  AGCGGCGGGGTGGAGGTCCCGACGTGACCGGTCCCTACCGTCCCTACCGTCCCTACCGTCCCT 240
Db 181  AGCGGCGGGGTGGAGGTCCCGACGTGACCGGTCCCTACCGTCCCTACCGTCCCTACCGTCCCT 240
Qy 241  TCAGAGACCCCGGAGGTGCCAAACATCGGTCTGTATCGGTCTGTATCGGTCTGTATCGGTCTGT 300
Db 241  TCAGAGACCCCGGAGGTGCCAAACATCGGTCTGTATCGGTCTGTATCGGTCTGTATCGGTCTGT 300
Qy 301  TCAGAGACCCCGGAGGTGCCAAACATCGGTCTGTATCGGTCTGTATCGGTCTGTATCGGTCTGT 360
Db 301  TCAGAGACCCCGGAGGTGCCAAACATCGGTCTGTATCGGTCTGTATCGGTCTGTATCGGTCTGT 360
Qy 361  ACCAGATCCACTACCTACCGGACGAGGAGGACCGCCACGTCGTGGTGGTGGTGGTGGTGGTGGT 420
Db 361  ACCAGATCCACTACCTACCGGACGAGGAGGACCGCCACGTCGTGGTGGTGGTGGTGGTGGTGGT 420
Qy 421  CGCGGATCGACGACGAGGCGCGTTCGGGAGGCGCGGTTCGGTGGTGGTGGTGGTGGTGGTGGTGG 480
Db 421  CGCGGATCGACGACGAGGCGCGTTCGGGAGGCGCGGTTCGGTGGTGGTGGTGGTGGTGGTGGTGG 480
Qy 481  GCGAGTTCGAGTACGTGCTTCGTTCGAGTGGACTACATGGACGTGTGTGTGTGTGTGTGTGTGTGT 540
Db 481  GCGAGTTCGAGTACGTGCTTCGTTCGAGTGGACTACATGGACGTGTGTGTGTGTGTGTGTGTGTGT 540
Qy 541  TGGTGTGCGTGGCCACCGGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 600
Db 541  TGGTGTGCGTGGCCACCGGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGCAGCAGCAGCAG 600
Qy 601  TGATGGCGCCAAACATGCGAGCGCCAGCGGTTCGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGG 660
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Db 601 TGTGGGGCCCAACATGACAGCCAGCGGTTCCGCTGGTCGGCAGAGCGCGCTGG 660
Qy 661 TGGGACCGGCATGGAGTGTGGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGGACCGGCATGGAGTGTGGCGCGCGATNGACGCGCGACGT 705
RESULT 15
US-09-285-306-10
; Sequence 10, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-10

Query Match 98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 3,7e-151;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;
Qy 1 CCCAGGACGTGGAGCGCATCAACGCGACACCTGATCAACATCCGTCCAGTCCGTGGCGG 60
Db 1 CCCAGGACGTGGAGCGCATCAACGCGACACCTGATCAACATCCGTCCGTGGCGG 60
Qy 61 CGATCAAGGAGTTCTTCGGACACGACGCTGTCCAGTTTCATGGACAGAACACCGC 120
Db 61 CGATCAAGGAGTTCTTCGGACACGACGCTGTCCAGTTTCATGGACAGAACACCGC 120
Qy 121 TGTGGGGCTCACCCACAAGCGCCCTGTGGCGCTGGCGCTGGCGTGGTCTGTCCCGGG 180
Db 121 TGTGGGGCTGACCCACAAGCGCCCTGTGGCGCTGGCGTGGTCTGTCCCGGG 180
Qy 181 AGCGGGCCGGGCTGAGTCCGCGACGTGTCACCGTCCCACTACGCGCGGATGTGCCGA 240
Db 181 AGCGGGCCGGGCTGAGTCCGCGACGTGTCACCGTCCCACTACGCGCGGATGTGCCGA 240
Qy 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTATGGCGGG 300
Db 241 TCGAGACCCCGGAGGTCCCAACATCGGTCTGATCGGCTCGCTGTGCGGTGTATGGCGGG 300
Qy 301 TCAACCCGTTCCGGTTTCATCGAGACGCGCTACCGCAAGGTGTGACGCGGTGTGCACCG 360
Db 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGGTGTGACGCGGTGTGCACCG 360
Qy 361 ACAGATCCACTACCTGACCGCGACGAGGAGACCGCCACGTSGTGGCGAGGCCAACT 420
Db 361 ACAGATCCACTACCTGACCGCGACGAGGAGACCGCCACGTSGTGGCGAGGCCAACT 420
Qy 421 CGCGATCGAGACAGGCGCGTTTCGGAGGCGCGGTCGTCCCGCGCAAGGCGG 480
Db 421 CGCGATCGAGACAGGCGCGTTTCGGAGGACGCCGCGTCTGGTCCCGCGCAAGGCGG 480
Qy 481 GCGAGTCCAGTACGTGCGCTCGTCGAGGTGACTACATGACGTGTGCGCGGCCAGA 540
Db 481 GCGAGTCCAGTACGTGCGCTCGTCGAGGTGACTACATGACGTGTGCGCGGCCAGA 540
Qy 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTTCGAGCACGACGACCCCAACCGTGCCC 600
Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCTTCGAGCACGACGACCCCAACCGTGCCC 600

Qy 601 TGTGGGGCCCAACATGACAGCCAGCGGTTCCGCTGGTCGGCAGAGCGCGCTGG 660
Db 601 TGTGGGGCCCAACATGACAGCCAGCGGTTCCGCTGGTCGGCAGAGCGCGCTGG 660
Qy 661 TGGGACCGGCATGGAGTGTGGCGCGCGATCGACGCGGCGACGT 705
Db 661 TGGGACCGGCATGGAGTGTGGCGCGCGATCGACGCGGCGACGT 705

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OM nucleic - nucleic search, using sw model

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Title: US-09-285-306-10
Perfect score: 705
Sequence: 1 cccagcgagtgaggcgatcc.....ggcgatcgagcgagcgagt 705

Scoring table: IDENTITY NUC

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Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	606.6	86.0	706	3	US-08-797-812-24
2	599	85.0	4403765	3	US-09-103-840A-2
3	599	85.0	411529	3	US-09-103-840A-1
4	563.8	80.0	3447	2	US-08-313-185-57
5	563.8	80.0	3447	3	US-09-082-614A-57
6	536.4	76.1	970	1	US-08-250-030-1
7	536.4	76.1	970	5	PCT-US95-06790-1
8	526.4	74.7	620	2	US-08-757-653-135
9	526.4	74.7	620	2	US-08-757-653-138
10	526.4	74.7	620	2	US-08-520-946-135
11	526.4	74.7	620	4	US-08-520-946-138
12	526.4	74.7	620	4	US-09-655-378A-135
13	526.4	74.7	620	4	US-09-655-378A-138
14	524.8	74.4	620	2	US-08-757-653-136
15	524.8	74.4	620	2	US-08-757-653-137
16	524.8	74.4	620	2	US-08-757-653-139
17	524.8	74.4	620	2	US-08-757-653-140
18	524.8	74.4	620	4	US-08-520-946-136
19	524.8	74.4	620	4	US-08-520-946-137
20	524.8	74.4	620	4	US-08-520-946-139
21	524.8	74.4	620	4	US-08-520-946-140
22	524.8	74.4	620	4	US-09-655-378A-136
23	524.8	74.4	620	4	US-09-655-378A-137
24	524.8	74.4	620	4	US-09-655-378A-139
25	524.8	74.4	620	4	US-09-655-378A-140
26	460.6	65.3	706	3	US-08-797-812-25
27	373.2	52.9	4074	4	US-09-252-991A-4737

28	373.2	52.9	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
29	338	47.9	4083	4	US-09-489-039A-22	Sequence 22, Appl
30	338	47.9	4206	4	US-09-489-039A-30	Sequence 30, Appl
31	291.8	41.4	432	2	US-08-313-185-59	Sequence 59, Appl
32	291.8	41.4	432	3	US-09-082-614A-59	Sequence 59, Appl
33	279	39.6	324	4	US-08-750-088A-36	Sequence 36, Appl
34	279	39.6	324	4	US-09-722-319-36	Sequence 36, Appl
35	265.2	37.6	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
36	264	37.4	2964	4	US-09-540-236-1097	Sequence 1097, Ap
37	264	37.4	31063	4	US-09-596-002-20	Sequence 20, Appl
38	250.8	35.6	1830121	4	US-09-557-884-1	Sequence 1, Appli
39	250.8	35.6	1830121	4	US-09-643-990A-1	Sequence 1, Appli
40	250.4	35.5	319	4	US-08-750-088A-35	Sequence 35, Appl
41	250.4	35.5	319	4	US-09-722-319-35	Sequence 35, Appl
42	249.8	35.4	11935	4	US-09-634-238-401	Sequence 401, App
43	246.4	35.0	14672	4	US-08-961-527-111	Sequence 111, App
44	244.4	34.7	4143	4	US-09-328-352-4006	Sequence 4006, Ap
45	225.6	32.0	329	4	US-08-750-088A-34	Sequence 34, Appl

ALIGNMENTS

RESULT 1
US-08-797-812-24
; Sequence 24, Application US/08797812
; Patent No. 6228575
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas A.
; APPLICANT: Mack, David
; APPLICANT: Chee, Mark S.
; APPLICANT: Berno, Anthony J.
; APPLICANT: Stryer, Lubert
; APPLICANT: Ghandour, Ghassan
; APPLICANT: Wang, Ching
; TITLE OF INVENTION: Chip-Based Species Identification and
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/797,812
; FILING DATE: 07-FEB-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/017,765
; FILING DATE: 15-MAY-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/629,031
; FILING DATE: 08-APR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/012,631
; FILING DATE: 01-MAR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/011,339
; FILING DATE: 08-FEB-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Fitts, Renee A.
; REGISTRATION NUMBER: 35,136
; REFERENCE/DOCKET NUMBER: 16528X-018550
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-326-2400
; TELEFAX: 415-326-2422

; INFORMATION FOR SEQ ID NO: 24:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 706 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: cDNA
 ; US-08-797-812-24

Query Match 86.0%; Score 606.6; DB 3; Length 706;
 Best Local Similarity 90.6%; Pred. No. 3.6e-111; Indels 0; Gaps 0;
 Matches 639; Conservative 6; Mismatches 60;

Qy	1	CCGAGGAGCTGGAGGCGATCACACCGCAGACCTGTATCAACATCCCGTCRGTGCGG	60
Db	2	CCGAGGAGCTGGAGGCGATCACACCGCAGACCTGTATCAACATCCCGTCRGTGCGG	61
Qy	61	CGATCAAGGAGTTCTTCGGACCAAGCGGCTGTCCGAGTTCCTGATGACCAAGCAACCCG	120
Db	62	CGATCAAGGAGTTCTTCGGACCAAGCGGCTGTCCGAGTTCCTGATGACCAAGCAACCCG	121
Qy	121	TGTCGGGTCTGACCCCAAGCGGCTGTCCGAGTTCCTGATGACCAAGCAACCCG	180
Db	122	TGTCGGGTCTGACCCCAAGCGGCTGTCCGAGTTCCTGATGACCAAGCAACCCG	181
Qy	181	AGCGGCGGCTGTGAGGCTGTGATGACACCGCTGTGATGACCAAGCAACCCG	240
Db	182	AGCGTCCGCGCTGTGAGGCTGTGATGACACCGCTGTGATGACCAAGCAACCCG	241
Qy	241	TCGAGACCCGCGGCTGTGAGGCTGTGATGACACCGCTGTGATGACCAAGCAACCCG	300
Db	242	TCGAAACCCGCTGTGAGGCTGTGATGACACCGCTGTGATGACCAAGCAACCCG	301
Qy	301	TSAAACCCGCTGTGAGGCTGTGATGACACCGCTGTGATGACCAAGCAACCCG	360
Db	302	TCAAACCCGCTGTGAGGCTGTGATGACACCGCTGTGATGACCAAGCAACCCG	361
Qy	361	ACGAGATCCACTACTGACCGCGGACGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	420
Db	362	ACGAGATCCACTACTGACCGCGGACGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	421
Qy	421	CGCGATCGACGACGAGGCGGCTGTGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	480
Db	422	CGCGATCGACGACGAGGCGGCTGTGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	481
Qy	481	CGGAGGTCGAGTACGTCGCTCGGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	540
Db	482	CGGAGGTCGAGTACGTCGCTCGGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	541
Qy	541	TGCTGTGCGTGGCCACCGCGATGATCCGCTGTGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	600
Db	542	TGCTGTGCGTGGCCACCGCGATGATCCGCTGTGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	601
Qy	601	TGATGGGCGCAACATGACGAGGCGGCTGTGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	660
Db	602	TCATGGGCGCAACATGACGAGGCGGCTGTGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	661
Qy	661	TGGGACCGCGATGAGGCTGTGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	705
Db	662	TGGGACCGCGATGAGGCTGTGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	706

RESULT 2
 US-09-103-840A-2
 ; Sequence 2, Application US/09103840A
 ; Patent No. 6294328
 ; GENERAL INFORMATION:
 ; APPLICANT: FLEISCHMAN, Robert D.
 ; APPLICANT: WHITE, Owen R.
 ; APPLICANT: FRASER, Claire M.
 ; APPLICANT: VENTER, John C.
 ; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
 ; TITLE OF INVENTION: TUBERCULOSIS

; FILE REFERENCE: 24366-20007.00
 ; CURRENT APPLICATION NUMBER: US/09/103,840A
 ; CURRENT FILING DATE: 1998-06-24
 ; NUMBER OF SEQ ID NOS: 2
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 2
 ; LENGTH: 4403765
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium tuberculosis
 ; FEATURE:
 ; OTHER INFORMATION: CDC 1551
 ; OTHER INFORMATION: "n" bases at various positions throughout the sequence
 ; OTHER INFORMATION: represent a, t, c or g
 ; US-09-103-840A-2

Query Match 85.0%; Score 599; DB 3; Length 4403765;
 Best Local Similarity 90.4%; Pred. No. 1.8e-109;
 Matches 632; Conservative 6; Mismatches 61; Indels 0; Gaps 0;

Qy	1	CCCAGGACGTGGAGGCGATCACACCGCAGACCTGTATCAACATCCCGTCRGTGCGG	60
Db	762963	CCCAGGACGTGGAGGCGATCACACCGCAGACCTGTATCAACATCCCGTCRGTGCGG	763022
Qy	61	CGATCAAGGAGTTCTTCGGACCAAGCGGCTGTCCGAGTTCCTGATGACCAAGCAACCCG	120
Db	763023	CGATCAAGGAGTTCTTCGGACCAAGCGGCTGTCCGAGTTCCTGATGACCAAGCAACCCG	763082
Qy	121	TGTCGGGTCTGACCCCAAGCGGCTGTCCGAGTTCCTGATGACCAAGCAACCCG	180
Db	763083	TGTCGGGTCTGACCCCAAGCGGCTGTCCGAGTTCCTGATGACCAAGCAACCCG	763142
Qy	181	AGCGGCGGCTGTGAGGCTGTGATGACACCGCTGTGATGACCAAGCAACCCG	240
Db	763143	AGCGTCCGCGCTGTGAGGCTGTGATGACACCGCTGTGATGACCAAGCAACCCG	763202
Qy	241	TCGAGACCCGCGGCTGTGAGGCTGTGATGACACCGCTGTGATGACCAAGCAACCCG	300
Db	763203	TCGAAACCCGCTGTGAGGCTGTGATGACACCGCTGTGATGACCAAGCAACCCG	763262
Qy	301	TSAAACCCGCTGTGAGGCTGTGATGACACCGCTGTGATGACCAAGCAACCCG	360
Db	763263	TCAAACCCGCTGTGAGGCTGTGATGACACCGCTGTGATGACCAAGCAACCCG	763322
Qy	361	ACGAGATCCACTACTGACCGCGGACGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	420
Db	763323	ACGAGATCCACTACTGACCGCGGACGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	763382
Qy	421	CGCGATCGACGACGAGGCGGCTGTGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	480
Db	763383	CGCGATCGACGACGAGGCGGCTGTGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	763442
Qy	481	CGGAGGTCGAGTACGTCGCTCGGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	540
Db	763443	CGGAGGTCGAGTACGTCGCTCGGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	763502
Qy	541	TGCTGTGCGTGGCCACCGCGATGATCCGCTGTGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	600
Db	763503	TGCTGTGCGTGGCCACCGCGATGATCCGCTGTGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	763562
Qy	601	TGATGGGCGCAACATGACGAGGCGGCTGTGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	660
Db	763563	TCATGGGCGCAACATGACGAGGCGGCTGTGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	763622
Qy	661	TGGGACCGCGATGAGGCTGTGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	699
Db	763623	TGGGACCGCGATGAGGCTGTGAGGAGGACCGGCTGTGATGACCAAGCAACCCG	763661

RESULT 3
 US-09-103-840A-1
 ; Sequence 1, Application US/09103840A
 ; Patent No. 6294328
 ; GENERAL INFORMATION:
 ; APPLICANT: FLEISCHMAN, Robert D.
 ; APPLICANT: WHITE, Owen R.
 ; APPLICANT: FRASER, Claire M.
 ; APPLICANT: VENTER, John C.
 ; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
 ; TITLE OF INVENTION: TUBERCULOSIS


```

; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; TITLE OF INVENTION: TUBERCULOSIS
; FILE REFERENCE: 24366-20007.00
; CURRENT APPLICATION NUMBER: US/09/103,840A
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37RV
US-09-103-840A-1

Query Match      85.0%; Score 599; DB 3; Length 4411529;
Best Local Similarity 90.4%; Pred. No. 1.8e-109;
Matches 632; Conservative 6; Mismatches 61; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCCRCGTGTCGGCG 60
Db 761003 CCCAGACGTGGAGGCGATCACACCGCAGACCTTGATCAACATCCGCCGGTGTGCGCG 761062

QY 61 CGATCAAGAGTCTTCGCGACACGACCCAGCTGCCAGTTCTATGACACGAAACACCCGC 120
Db 761063 CGATCAAGAGTCTTCGCGACACGACCCAGCTGAGCAATTCATGACACGAAACACCCGC 761122

QY 121 TGTCGGGTCTGACCCACAAAGCCCGCTGTGCGCGTGGCGCGGTGTCTGTCCCGG 180
Db 761123 TGTCGGGTCTGACCCACAAAGCCCGCTGTGCGCGTGGCGCGGTGTCTGTCCCGG 761182

QY 181 AGCGGGCGGCTCGAGGTCCTGAGTCCGTGACGTGACCCCTGCACTACGCGCGGATGTCCCGA 240
Db 761183 AGCGTCCGCGGTGAGGTCCTGAGTCCGTGACGTGACCCCTGCACTACGCGCGGATGTCCCGA 761242

QY 241 TCGAGACCCGAGGTCCTGAGTCCGTGACGTGACCCCTGCACTACGCGCGGATGTCCCGG 300
Db 761243 TCGAAACCCCTGAGGTCCTGAGTCCGTGACGTGACCCCTGCACTACGCGCGGATGTCCCGG 761302

QY 301 TSAACCCGTCGGGTCTATCGAGACCCCGTACCGCAAGTGTGACCGTGTGTCACCG 360
Db 761303 TCAACCCGTCGGGTCTATCGAAACCCCGTACCGCAAGTGTGACCGTGTGTCACCG 761362

QY 361 ACGAGATCCACTACTGACCCGCGGAGGACCGCCACGCTGTCGCGAGGCGCAACT 420
Db 761363 ACGAGATCCGTTACTGACCCGCGGAGGACCGCCACGCTGTCGCGAGGCGCAACT 761422

QY 421 CGCGATCGACGACAAAGGCGCGTTCGAGGAGKCCCGGGTCTGTGTCGCGGSAAGCGG 480
Db 761423 CGCGATCGATCGGACCGGTGCTTCGAGCGCGCGTGTGTCGCGGSAAGCGG 761482

QY 481 GCGAGGTGAGTACGTGTCCTGTCGAGGTGCACTACATGAGCTGTGCGCGGCCAGA 540
Db 761483 GCGAGGTGAGTACGTGTCCTGTCGAGGTGCACTACATGAGCTGTGCGCGGCCAGA 761542

QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCCCAACCGTGCCC 600
Db 761543 TGGTGTGCGTGGCCACCGCGATGATTCCTTCGAGCAGCAGCAGCCCAACCGTGCCC 761602

QY 601 TGATGGCGCCAAATGATGACGCGCAGGCGGTTCGCTGTGGCAGGCGCGCGTGG 660
Db 761603 TCATGGGCGCCAAATGATGACGCGCAGGCGGTTCGCTGTGGCAGGCGCGCGTGG 761662

QY 661 TGGGCACCGGATGAGTGTGCGCGCGCGATCGACGCGG 699
Db 761663 TGGGCACCGGATGAGTGTGCGCGCGCGATCGACGCGG 761701

RESULT 4
US-08-313-185-57

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; Sequence 57, Application US/08313185
; Patent No. 5851763
; GENERAL INFORMATION:
; APPLICANT: Heym, Beate
; APPLICANT: Cole, Stewart
; APPLICANT: Young, Douglas
; APPLICANT: Zhang, Ying
; APPLICANT: Honore, Nadine
; APPLICANT: Telenti, Amalio
; APPLICANT: Bodmer, Thomas
; TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
; TITLE OF INVENTION: in Mycobacterium Tuberculosis
; NUMBER OF SEQUENCES: 66
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
; ADDRESS: 1300 I Street, N.W.
; CITY: Washington
; STATE: D.C.
; COUNTRY: USA
; ZIP: 20005-3315
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/313,185
; FILING DATE: 12-OCT-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Meyers, Kenneth J.
; REGISTRATION NUMBER: 25,146
; REFERENCE/DOCKET NUMBER: 02356-0068-00000
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 408-4000
; TELEFAX: (202) 408-4400
; INFORMATION FOR SEQ ID NO: 57:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 3447 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-313-185-57

Query Match      80.0%; Score 563.8; DB 2; Length 3447;
Best Local Similarity 87.3%; Pred. No. 1e-102;
Matches 610; Conservative 6; Mismatches 83; Indels 0; Gaps 0;

QY 1 CCCAGACGTGGAGGCGATCACCGCAGACCCCTGATCAACATCCGTCCRCGTGTCGGCG 60
Db 1124 CCCAGACGTGGAGGCGATCACCGCAGACCGCTGATCAATATCCGTCCGTGTCGCG 1183

QY 61 CGATCAAGAGTCTTCGCGACCGACCGAGCTGTCCAGTTATGACAGCAACACCGCG 120
Db 1184 CTATCAAGAGTCTTCGCGACCGACCGAGCTGTCCAGTTATGATGATCAGAACACCTC 1243

QY 121 TGTCGGGTCTGACCCACAAAGCCCGCTGTGCGCGCTGGCGCGTGGTGTGTCGCGGTG 180
Db 1244 TGTCGGGTCTGACCCACAAAGCCCGCTGTGCGCGCTGGCGCGTGGTGTGTCGCGGTG 1303

QY 181 AGCGGGCGGCTTGAGTCCGTGACGTGACCCGCTGCACTAGCGCGGATGTGCCGA 240
Db 1304 AGCGTCCGGCTAGAGTCCGTGACGTGACCCGCTGCACTAGCGCGGATGTGCCGA 1363

QY 241 TCGAGACCCCGAGGTCCTGAGTCCGCTGTGATGCGGTGTCGCTGTCGTCGTCGCGG 300
Db 1364 TCGAGACTCCGAGGTCCTGAGTCCGCTGTGATGCGGTGTCGCTGTCGTCGTCGCGG 1423

QY 301 TSAACCCGTCGGGTCTATCGAGACCCCGTACCGCAAGTGTGACCGGTGTGTCGCGG 360
Db 1424 TCAACCCGTCGGGTCTATCGAAACCCCGTACCGCAAGTGTGACCGGTGTGTCGCGG 1483

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361	QY	ACGAGATCCACTACCTGACCGCGCAGGAGGACCGCCACGTSGTGGCGCAGGCCAACT	420
1484	Db	ACGAGATCGAATACTTGGACCGCTGACGAGGAACCGCCATGTCGTGGCGCAGGCCAACT	1543
421	QY	CGCCGATCGACGACAGAGGCGGTTTCAGAGAGKCCGGGTGCTGTTCCGCCGSAAGCGG	480
1544	Db	CGCCGATCGACGAGGCGCGGTTCTTCGAGCGCGCGGTTCGGTGCGCCGCAAGCGG	1603
481	QY	GCGAGGTCCGAGTACGTGCCCTTCGTCGAGGTGACATCGACGTGTCGCCCGCGCCAGA	540
1604	Db	GCGAGGTGAGTACGTGGCCTCGTCCGAGGTGATTACATGGATGCTCGCCACGCCAGA	1663
541	QY	TGATGTCGGTGGGCCACCGCGATGATCCGTTCTTCGAGGACGACGAGCCGCAACCGTGCCC	600
1664	Db	TGATGTCGGTGGGCCACAGCGATGATTCGTTCTTCGAGCAGCAGCGCCAAACCGTSCCC	1723
601	QY	TGATGGCGGCCAACATGTCACGCGCCAGCGGTTCCGCTGGTGGCGAGCGAGCGCGCGTGG	660
1724	Db	TGATGGCGGCTAACATGTCACGCGCCAGCGGTTCCGTTGGTGGCGAGCGAACCGTGTGG	1783
661	QY	TGGGCACCGGCATGGAGCTCGCGCGCGCGATTCGACGCGG	699
1784	Db	TGGGTACCGGTATGGAGTTCCGCGCGGCCATTCGACGCTG	1822

RESIST. 5

US-09-082-614A-57
Sequence 57, Application US/09082614A
Patent No. 6124098
GENERAL INFORMATION:
APPLICANT: Heym, Beate
APPLICANT: Cole, Stewart
APPLICANT: Young, Douglas
APPLICANT: Zhang, Ying
APPLICANT: Honore, Nadine
APPLICANT: Telenti, Amalio
APPLICANT: Bodmer, Thomas
TITLE OF INVENTION: Rapid Detection of Antibiotic Resistance
IN INVENTION: in Mycobacterium Tuberculosis
NUMBER OF SEQUENCES: 66
CORRESPONDENCE ADDRESS:
ADDRESSEE: Finnegan, Henderson, Farabow, Garrett &
ADDRESSEE: Dunner
STREET: 1300 I Street, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: USA

:	TOPOLOGY:	linear			
:	MOLECULE TYPE:	DNA (genomic)			
<hr/>					
US-09-082-614A-57	Query Match	80.0%;	Score 563.8;	DB 3;	Length 3447;
	Best Local Similarity	87.3%;	Pred. No. 1e-102;		
	Matches 610;	Conservative	6;	Mismatches 83;	Indels 0; Gaps 0;
<hr/>					
QY	1	CCGAGACGTGGAGGCATCAACCGCAGACCCGTGATCAACATCCGTCTCRGTTCGTGGCGG	60		
Db	1124	CCCAGACGTCGAGGCGATCACGCCGACAGCTGATCAATATCCGTCCGGTGTCCGCG	1183		
<hr/>					
QY	61	CGNATCAAGAGTTCITTCGCACACAGCAGCTGCCAGTTTCATGGACCAGAAACCCCG	120		
Db	1184	CTATCAAGGAATTCITTCGGACACAGCAGCTGTCGAGTTTCATGGATCAGAACAACCTC	1243		
<hr/>					
QY	121	TGTCGGGTTCACCCACAAGCGCGCTGTCGGCGCTGGSCCGGGTGSTCTCTCCCGGG	180		
Db	1244	TGTCGGGCTGACCCACAAGCGCGCTGTCGGCGCTGGSCCGGGTGTTCGCGTG	1303		
<hr/>					
QY	181	AGCGGCGCGCTCGTAGGTCCTGTGAACGTGACACCCGTCSACTACGGCCGATGTGCCGA	240		
Db	1304	AGCGTCGCGGCTTAGAGGTCCGTGACGTGCACCTTCGCATACTACGGCCGATGTGCCGA	1363		
<hr/>					
QY	241	TCAGAACCCCGGAGGTCCTCAACATCTGCTCATCGCTCGTGTGGTGTAYCGCGGG	300		
Db	1364	TCGAGACTCCGGAGGGCCGACATAGTCTGATCGGTTCAATTGTGGTGTACGGCGGG	1423		
<hr/>					
QY	301	TSAAACCGTTTCGGGTTTCATGAGACCCCGTACCGCAAAGTGTTGTCGACGGTGTGTCACG	360		
Db	1424	TCAACCCCTTCGGGTTTCATCGAAACACCGTACCGCAAAGTGGTGTGACGGTGTGTCAGCG	1483		
<hr/>					
QY	361	ACGAGATCCACTACTGACCGCCGACGAGGACACGCCACTSGTGGCGCAGGCCAACT	420		
Db	1484	ACGAGATCGAATTACTTGACCGCTGACGAGGAACCGCCAATGTCGTGGCGCAGGCCAACT	1543		
<hr/>					
QY	421	CGCGCATCGACGAACAAGGGCCGCTTCGAGAGACCCCGGGTGCTGGTCCGCGCGSAAAGCGG	480		
Db	1544	CGCGCATCGACGAGGCCGCGCTTCCTCGAGCGCGCGTGTGGTGTGCGCGCAAGCGG	1603		
<hr/>					
QY	481	GCGAGSTCGAGTACGTGCCCTCGTCGAGGTGGACTACATGACAGTGTCCGCGCGCCAGA	540		
Db	1604	GCGAGSTGGAGTACGTGGCTCGTCGAGGTGATTACATGAGTGTCTCTCCACAGCCAGA	1663		
<hr/>					
QY	541	TGTTGTCGTTGGCCACCGCATGATCCGCTTCCTCGAGCAGCAGCAGCAACCGTCCCC	600		
Db	1664	TGTTGTCGTTGGCCACAGCATGATTCCGTTTCCTTGAGCAGCAGCAGCAGCAACCGTCCCC	1723		
<hr/>					
QY	601	TGATGGCGCAACATGACGCGCCAGCGGTTCCGCTGGTGGCAGCAGCGCGCGCGCTGG	660		
Db	1724	TGATGGCGCTAACATGACGCGCCAGCGGTTCCGTTGGTGGCAGCGAACGACCGTTGG	1783		
<hr/>					
QY	661	TGGGCACCGCATGGAGCTCGCGCGCGCATTCGACGCGG	699		
Db	1784	TGGGTACCGTATGGAGTTCGGCGCGCCATTCGACGCTG	1822		

RESULT 6

US-08-250-030-1
 ; Sequence 1, Application US/08250030
 ; Patent No. 5643723
 ; GENERAL INFORMATION:
 ; APPLICANT: Persing, David H.
 ; TITLE OF INVENTION: Detection of a Genetic Locus Encoding
 ; TITLE OF INVENTION: Resistance to Rifampin in Mycobacterial Cultures and in
 ; TITLE OF INVENTION: Clinical Specimens
 ; NUMBER OF SEQUENCES: 15
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Schwegman, Lundberg & Woessner
 ; STREET: 3500 IDS Center
 ; CITY: Minneapolis
 ; STATE: MN
 ; COUNTRY: USA

ZIP: 55402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/250,030
FILING DATE: 26-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Muetting, Ann M.
REGISTRATION NUMBER: 33,977
REFERENCE/DOCKET NUMBER: 150.105US1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-339-0331
TELEFAX: 612-339-3061
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 970 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
US-08-250-030-1

Query Match 76.1%; Score 536.4; DB 1; Length 970;
Best Local Similarity 90.0%; Pred. No. 2.3e-97;
Matches 567; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

QY 1 CCCAGGAGTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCCGTCGTGGCGG 60
Db |||||
QY 341 CCCAGGAGTGGAGGCGATCAACCGCAGACCGTGTATCAACATCCGCGGTGGTCGCG 400
Db |||||
QY 61 CGATCAAGAGTCTTCGGCACAGCAGCTGCCAGTTCATGACAGCAACACCCGC 120
Db |||||
QY 401 CGATCAAGAGTCTTCGGCACAGCAGCTGCCAGTTCATGACAGCAACACCCGC 460
Db |||||
QY 121 TGTGGGTCTGACCAAGCGCCCTGTGCGCGCTCGGCGCTGGCGCGGTGTGTCCCGG 180
Db |||||
QY 461 TGTGGGTCTGACCAAGCGCCCTGTGCGCGCTCGGCGCTGGCGCGGTGTGTCCCGG 520
Db |||||
QY 181 AGCGGCGCGGCTGGAGTTCGTCGCTGACGTCACCGCTGTCACCTACGCGCGGATGTCGCG 240
Db |||||
QY 521 AGCGTCCGGGCTGGAGGAGCGGACGTCACCGCTGTCACCTACGCGCGGATGTCGCG 580
Db |||||
QY 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGTATCGGCTCGCTGTGCTGTATGCGCGG 300
Db |||||
QY 581 TCGAAACCCCTGAGGCGCCCAACATCGGTCTGTATCGGCTCGCTGTGCTGTATGCGCGG 640
Db |||||
QY 301 TSAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGTGTGTGTGTGTGTGTGT 420
Db |||||
QY 701 ACGAGATCGTGTACCTGACCGCCGACGAGGAGACCGCACTGTGTGTGTGTGTGTGTGT 760
Db |||||
QY 421 CGCCGATCGACGAAAGGCGCGGTTCGAGGAGKCCCGGCTGTGTGTGTGTGTGTGTGTGT 480
Db |||||
QY 761 CGCCGATCGATCGGACGCTGCTTCGTGTCGAGCCGCGGTGTGTGTGTGTGTGTGTGTGT 820
Db |||||
QY 481 GCGAGGTGAGTACGTGCGCTGTCGAGGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 540
Db |||||
QY 821 GCGAGGTGAGTACGTGCGCTGTCGAGGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 580
Db |||||
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTGAGCAGCAGCAGCAGCAGCAGCAGC 600
Db |||||
QY 881 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCCTGAGCAGCAGCAGCAGCAGCAGCAG 630
Db |||||
QY 601 TGATGGGCGCAACATGACGCGCCAGGCGG 630
Db |||||
QY 941 TCATGGGCGCAACATGACGCGCCAGGCGG 970
Db |||||

RESULT 7
PCT-US95-06790-1
Sequence 1, Application PC/TUS9506790
GENERAL INFORMATION:
APPLICANT: Mayo Foundation for Medical Education and Research
APPLICANT: and Hoffmann-La Roche Inc.
TITLE OF INVENTION: Detection of a Genetic Locus Encoding
TITLE OF INVENTION: Resistance to Rifampin
NUMBER OF SEQUENCES: 15
CORRESPONDENCE ADDRESS:
ADDRESSEE: Schwegman, Lundberg & Woessner
STREET: 3500 IDS Center
CITY: Minneapolis
STATE: MN
COUNTRY: USA
ZIP: 55402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/06790
FILING DATE: 26-MAY-1995
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Raasch, Kevin W.
REGISTRATION NUMBER: 35,651
REFERENCE/DOCKET NUMBER: 150.105WO1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612-339-0331
TELEFAX: 612-339-3061
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 970 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA
PCT-US95-06790-1

Query Match 76.1%; Score 536.4; DB 5; Length 970;
Best Local Similarity 90.0%; Pred. No. 2.3e-97;
Matches 567; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

QY 1 CCCAGGAGTGGAGGCGATCAACCGCAGACCCCTGATCAACATCCGTCCGTCGTGGCGG 60
Db |||||
QY 341 CCCAGGAGTGGAGGCGATCAACCGCAGACCGTGTATCAACATCCGCGGTGGTCGCG 400
Db |||||
QY 61 CGATCAAGAGTCTTCGGCACAGCAGCTGCCAGTTCATGACAGCAACACCCGC 120
Db |||||
QY 401 CGATCAAGAGTCTTCGGCACAGCAGCTGCCAGTTCATGACAGCAACACCCGC 460
Db |||||
QY 121 TGTGGGTCTGACCAAGCGCCCTGTGCGCGCTCGGCGCTGGCGCGGTGTGTCCCGG 180
Db |||||
QY 461 TGTGGGTCTGACCAAGCGCCCTGTGCGCGCTCGGCGCTGGCGCGGTGTGTCCCGG 520
Db |||||
QY 181 AGCGGCGCGGCTGGAGTTCGTCGCTGACGTCACCGCTGTCACCTACGCGCGGATGTCGCG 240
Db |||||
QY 521 AGCGTCCGGGCTGGAGGAGCGGACGTCACCGCTGTCACCTACGCGCGGATGTCGCG 580
Db |||||
QY 241 TCGAGACCCCGAGGCTCCCAACATCGGTCTGTATCGGCTCGCTGTGCTGTATGCGCGG 300
Db |||||
QY 581 TCGAAACCCCTGAGGCGCCCAACATCGGTCTGTATCGGCTCGCTGTGCTGTATGCGCGG 640
Db |||||
QY 301 TSAACCCGTTCCGGTTCATCGAGACCCCGTACCGCAAGGTGTGTGTGTGTGTGTGTGT 360
Db |||||
QY 641 TCAACCCGTTCCGGTTCATCGAAACCGCGTACCGCAAGGTGTGTGTGTGTGTGTGTGT 700
Db |||||
QY 361 ACGAGATCCACTACTGACCGCGCAGGAGGAGCCGCGCTGTGTGTGTGTGTGTGTGTGT 420
Db |||||

Db 701 ACAGATCGTGTACTACCGCGGACGAGAGGACCGCCACGTGGTGGCACAGCCCAATT 760
Qy 421 CGCGATCGACGACAAAGGCGCGTTTCGAGGAGKCCCGGGTCTGGTCCGCGSAAAGCGG 480
Db 761 CGCGATCGATCGGACGCGTCTGTCGAGCGCGCGTCTGGTCCGCGCAAGCGG 820
Qy 481 GCAGGTCGAGTACGTGCTCCGAGGTGAGTACATGAGGAGTCTCGCGCGCCAGA 540
Db 821 GCAGGTGGAGTACGTGCTCCGAGGTGAGTACATGAGGAGTCTCGCGCGCCAGA 880
Qy 541 TGGTGTGGGTCGACCGCGATGATCCGTTCTCGAGAGCAGAGCGCAACCGTGCCC 600
Db 881 TGGTGTGGTGGCCACCGCGATGATTCCTTCTGGAGCAGCAGCAGCGCAACCGTGCCC 940
Qy 601 TGATGGCGCCAAACATGACGCGCCAGCGG 630
Db 941 TCATGGGGCAAAACATGACGCGCCAGCGG 970

RESULT 8
US-08-757-653-135
; Sequence 135, Application US/08/57653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-135

Query Match 74.7%; Score 526.4; DB 2; Length 620;
Best Local Similarity 89.8%; Pred. No. 2.1e-95;
Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

Qy 36 ATCAATCCCGTCRGTGTCGGCGCGATCAAGGAGTTCTTCGGCACGAGCGAGCTGTCC 95
Db 1 ATCAATCCCGCGCGTGTGTCGCGGATCAAGGAGTTCTTCGGCACGAGCGAGCTGAGC 60
Qy 96 CAGTTTCATGGACCAAGAAACCCGCTGTGGGTCTGACCCACAGAGCGCGGCTGTGGCG 155
Db 61 CAAATTCATGGACCAAGAAACCCGCTGTGGGTGTGACCCACAGAGCGCGAGCTGTGGCG 120

Qy 156 CTGGGCCCGGGTGGTCTGTCCCGGAGCGGCGCTCGAGGTCGCTGAGCTGCACCCG 215
Db 121 CTGGGGCCCGCGGTCTGTACGTGAGCTGCGCGGGCTGGAGGTCCCGAGCTGCACCCG 180
Qy 216 TCSACATACCGCGCGGATGTCGCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
Db 181 TCGACATACCGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
Qy 276 GGCTCGTGTCTGGTGTAYGCGCGGGTSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGC 335
Db 241 GGCTCGTGTCTGGTGTACGCGCGGGTCAACCCGTTCCGGTTTCATCGAAACCGCGTACCGC 300
Qy 336 AAGTGTGTACCGGTGTGGTACCGAGAGATCACTACCTGACCGCGCGAGGAGGAGAC 395
Db 301 AAGTGTGTACCGGTGTGGTGTAGCGAGATCGTGTACCTGACCGCGCGAGGAGGAC 360
Qy 396 CGCACGTGTGGCGCAGGCGCAACTCGCCGATCGACGACAAAGGCGCGGTTTCGAGGAGKCC 455
Db 361 CGCACGTGTGGCGCAGGCGCAATTCCGCGATCGATCGGACGCTGCTTCGTCGAGCGG 420
Qy 456 CGGTCGTGTTCGCGCGSAAAGCGGCGAGGTTCAGTACGTGCGCTCGTCGAGGTCGAC 515
Db 421 CGGTCGTGTTCGCGCGCAAGCGGCGAGGTTCAGTACGTGCGCTCGTCGAGGTCGAC 480
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Db 481 TACATGACGTGTGCGCGCGCGAGATGTTGTCGTCGCGCCACCGCGATGATCCCGTTCCTG 540
Qy 576 GAGCACGACGACGCAACCGTGCCTTCGTCGCGCGCCCAACATGACAGCGCGAGCGGTTCG 635
Db 541 GAGCACGACGACGCAACCGTGCCTTCATGGGGCAAAACATGACAGCGCGAGCGGTTCGCG 600
Qy 636 CTGTCGCGCAGCGAGGCGCC 655
Db 601 CTGTCGCGTAGCGAGGCGCC 620

RESULT 9
US-08-757-653-138/c
; Sequence 138, Application US/08/57653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:

SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-757-653-138

Query Match 74.7%; Score 526.4; DB 2; Length 620;
Best Local Similarity 89.8%; Pred. No. 2.1e-95;
Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

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QY 36 ATCAACATCCGTCCTGTCGGCGGATCAAGAGTCTTTCGGACCAACAGCAGCTGTCC 95
Db 620 ATCAACATCCGCGGTGTTCGGCGGATCAAGAGTCTTTCGGACCAACAGCAGCTGTCC 561
QY 96 CAGTTCATGACAGCAACACCGCTGTTCGGGTCTGACCCACAGCGCGCTGTTCGGCG 155
Db 560 CAATTTCATGACAGCAACACCGCTGTTCGGGTCTGACCCACAGCGCGCTGTTCGGCG 501
QY 156 CTGGGCGCGGTGTCTGTTCGGGAGCGGCGCGCTGTGAGTCTCGTACGTGCAACCGG 215
Db 500 CTGGGCGCGGTGTCTGTTCGGGAGCGGCGCGCTGTGAGTCTCGTACGTGCAACCGG 441
QY 216 TCSACTACGCGCGATGTCCGATCGAGACCCCGGAGTCCCAACATCGGTCTGATC 275
Db 440 TCGACTACGCGCGATGTCCGATCGAGACCCCGGAGTCCCAACATCGGTCTGATC 381
QY 276 GGCTCGCTGTCTGTGTGTCGGGGTAAACCGGTTCGGGTTCATCGAGACCCCGTACCGG 335
Db 380 GGCTCGCTGTCTGTGTGTCGGGGTAAACCGGTTCGGGTTCATCGAGACCCCGTACCGG 321
QY 336 AAGTGTGTGTCAGGTGTGTGTACCGAGATCCACTACTGACCCCGAGAGGAGGAC 395
Db 320 AAGTGTGTGTCAGGTGTGTGTAGCGAGATCGTACTGACCCCGAGAGGAGGAC 261
QY 396 CGCCACGTGTGGCGAGCCCAACTCGCGATCGAGCAAGGCGCGGTTCGAGGAGKCC 455
Db 260 CGCCACGTGTGGCGAGCCCAACTCGCGATCGAGCAAGGCGCGGTTCGAGGAGKCC 201
QY 456 CGGCTGTGTGTGTCGGCGAGGCGAGGTGAGTACGTGCGCTCGTCCGAGGTGAGAC 515
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QY 636 CTGTGCGCAGCGAGCGCC 655
Db 20 CTGTGCGTAGCGAGGCCCC 1
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RESULT 10

US-08-520-946-135
Sequence 135, Application US/08520946
Patent No. 6372424
GENERAL INFORMATION:
APPLICANT: BROW, MARY ANN D.
APPLICANT: LYAMICHEV, VICTOR I.
TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
TITLE OF INVENTION: PATHOGENS
NUMBER OF SEQUENCES: 160
CORRESPONDENCE ADDRESS:
ADDRESS: MEDLEN & CARROLL
STREET: 220 MONTGOMERY STREET, SUITE 2200
CITY: SAN FRANCISCO
STATE: CALIFORNIA

COUNTRY: UNITED STATES OF AMERICA
ZIP: 94104
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/520,946
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: CARROLL, PETER G.
REGISTRATION NUMBER: 32,837
REFERENCE/DOCKET NUMBER: FORS-01756
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 705-8410
TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 135:
SEQUENCE CHARACTERISTICS:
LENGTH: 620 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-520-946-135

Query Match 74.7%; Score 526.4; DB 4; Length 620;
Best Local Similarity 89.8%; Pred. No. 2.1e-95;
Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

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Db 1 ATCAACATCCGCGGTGTTCGGCGGATCAAGAGTCTTTCGGACCAACAGCAGCTGTCC 60
QY 96 CAGTTCATGACAGCAACACCGCTGTTCGGGTCTGACCCACAGCGCGCTGTTCGGCG 155
Db 61 CAATTTCATGACAGCAACACCGCTGTTCGGGTCTGACCCACAGCGCGCTGTTCGGCG 120
QY 156 CTGGGCGCGGTGTCTGTTCGGGAGCGGCGCGCTGTGAGTCCCAACATCGGTCTGATC 215
Db 121 CTGGGCGCGGTGTCTGTTCGGGAGCGGCGCGCTGTGAGTCCCAACATCGGTCTGATC 180
QY 216 TCSACTACGCGCGATGTTCGGCGATCGAGACCCCGGAGGTCCTCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGATGTTCGGCGATCGAGACCCCGTGGAGTCCGCGACGTGACCGG 240
QY 276 GGCTCGCTGTGTCGTGTGTCGGCGGTSAAACCGTTCGGGTTCATCGAGACCCCGTACCG 335
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QY 336 AAGTGTGTGTCAGGTGTGTGTACCGAGATCCACTACTGACCCCGCGAGAGGAGGAC 395
Db 301 AAGTGTGTGTCAGGTGTGTGTAGCGAGATCTGTACTGACCCCGCGAGAGGAGGAC 360
QY 396 CGCCACGTGTGGCGAGGCGCAACTCGCGCGATCGAGCAAGGCGCGGTTCGAGGAGKCC 455
Db 361 CGCCACGTGTGGCGAGGCGCAACTTCGCGCGATCGAGCGCGGTTCGTCGAGCGG 420
QY 456 CGGCTGTGTTCGGCGCGGSAAGCGGCGGAGGTGCGAGTACGTGCGCTCGTCCGAGGTGAC 515
Db 421 CGGCTGTGTTCGGCGCGGSAAGCGGCGGAGGTGCGAGTACGTGCGCTCGTCCGAGGTGAC 480
QY 516 TACATGAGCTGTGCGCGCGCAGATGTGTGCGGTGGCCACCGCGATCATCCGTTCTC 575
Db 481 TACATGAGCTGTGCGCGCGCAGATGTGTGCGGTGGCCACCGCGATCATCCGTTCTC 540
QY 576 GAGCAGCAGCAGCCCAACCGTCCCTGATGGCGCCCAACATCGAGCGCGGAGGTTCCG 635
Db 541 GAGCAGCAGCAGCCCAACCGTCCCTGATGGCGCCCAACATCGAGCGCGGAGGTTCCG 600
QY 636 CTGTGCGCAGCGAGCGCC 655
Db 1 CTGTGCGCAGCGAGCGCC 1
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QY 96 CAGTTCATGGACCAAGAACCCGCTGTGGGTCTGACCCCAAGCGCGCTGTGGCG 155
Db 61 CAATTCATGGACCAAGAACCCGCTGTGGGTCTGACCCCAAGCGCGCTGTGGCG 120
QY 156 CTGGCGCCGGGTGCTGTCCCGGAGCGCGCGCTGGAGTCCGTGACGTGCACCG 215
Db 121 CTGGCGCCGGGTGCTGTACGTGAGCGTCCGGGTGGAGTCCGTGACGTGCACCG 180
QY 216 TCSACTACGCGCGGATGTCGCGATCGAGACCCCGGAGGTCCCAACATCGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGCGCGCCCAACATCGTCTGATC 240
QY 276 GCCTGCTGTGGTGTATGCGCGGTGAACCGTTCGGGTTCATCGAGACCCCGTACCGC 335
Db 241 GCCTGCTGTGGTGTATGCGCGGTGAACCGTTCGGGTTCATCGAAACCGCGTACCGC 300
QY 336 AAGTGTGTGACGCGGTGTGTACCGACGAGATCCACTACTGACCGCGACGAGGAGAC 395
Db 301 AAGTGTGTGACGCGGTGTGTAGCGACGAGATCGTACTGACCGCGACGAGGAGAC 360
QY 396 CGCCAGTGTGGCGAGCCCAACTGCGGATCGACGACAAAGGCGCGTTCGAGGAGKCC 455
Db 361 CGCCAGTGTGGCGAGCCCAACTGCGGATCGATCGATCGATCGATCGATCGATCG 420
QY 456 CGGTGTGTGTCGCGCGGAGCGCGCGAGGTGAGTGGTCCCTGTCGAGTGGAC 515
Db 421 CGGTGTGTGTCGCGCGGAGCGCGCGAGGTGAGTGGTCCCTGTCGAGTGGAC 480
QY 516 TACATGGAGCTGTGCGCGCGGAGTGTGTCGCTGGCGCGCGATGATCCGTTCTTC 575
Db 481 TACATGGAGCTGTGCGCGCGGAGTGTGTCGCTGGCGCGCGATGATCCGTTCTTC 540
QY 576 GAGCACGACGACCAACCGTCCCTGATGGCGGCAACATCGACGCGCGGTTCCG 635
Db 541 GAGCACGACGACCAACCGTCCCTCATGGGGCAACATCGACGCGCGGTTCCG 600
QY 636 CTGGTGGCGAGGAGCGCC 655
Db 601 CTGGTCCGTAGCGAGGCGCC 620

RESULT 13

US-09-655-378A-138/c

; Sequence 138, Application US/09655378A

; Patent No. 6673616

; GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.

; LYAMICHEV, VICTOR I.

; OLIVE, DAVID M.

; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF

; PATHOGENS

; NUMBER OF SEQUENCES: 165

; CORRESPONDENCE ADDRESS:

; ADDRESS: MEDLEN & CARROLL

; STREET: 220 MONTGOMERY STREET, SUITE 2200

; CITY: SAN FRANCISCO

; STATE: CALIFORNIA

; COUNTRY: UNITED STATES OF AMERICA

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Patent In Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/655,378A

; FILING DATE: 05-Sep-2000

; CLASSIFICATION: <Unknown>

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 138:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; SEQUENCE DESCRIPTION: SEQ ID NO: 138:

US-09-655-378A-138

Query Match 74.7%; Score 526.4; DB 4; Length 620;
Best Local Similarity 89.8%; Pred. No. 2.1e-95;
Matches 557; Conservative 6; Mismatches 57; Indels 0; Gaps 0;

QY 36 ATCAACATCCGTCGCTGTCGCGCGCATCAAGAGATTCTTCGGCACACGACGAGTGTCC 95
Db 620 ATCAACATCCGCGCGGTGTGTCGCGCATCAAGAGATTCTTCGGCACACGACGAGTGTCC 561
QY 96 CAGTTTCATGGACCAAGAACCCGCTGTGGGTCTGACCCCAAGCGCGCTGTGGCG 155
Db 560 CAATTCATGGACCAAGAACCCGCTGTGGGTGTTGACCCCAAGCGCGCTGTGGCG 501
QY 156 CTGGCGCCGGGTGCTGTTCGCGGAGCGCGCGCTGGAGTCCGTGACGTGCACCGC 215
Db 500 CTGGCGCCGGGTGCTGTTCAGCTGAGCTGTCGCGGCTGGAGTCCGTGACCGC 441
QY 216 TCSACTACGCGCGGATGTCGCGGATCGAGACCCCGGAGGTCCCAACATCGTCTGATC 275
Db 440 TCGCACTACGCGCGGATGTCGCGGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATC 381
QY 276 GCCTGCTGTGGTGTATGCGCGGTSAACCCGTTTCGGGTTCATCGAGACCCCGTACCGC 335
Db 380 GCCTGCTGTGGTGTATGCGCGGTCAACCCGTTTCGGGTTCATCGAAACCGCGTACCGC 321
QY 336 AAGTGTGTGACGCTGTGTCACCGACGAGATCCACTACTGACCGCGACGAGGAGAC 395
Db 320 AAGTGTGTGACGCTGTGTCAGCGACGAGATCGTGTACTGACCGCGACGAGGAGAC 261
QY 396 CGCCAGTGTGGCGGACGACCAACTCGCGCATCGACGACAAAGGCGCGTTCGAGGAGKCC 455
Db 260 CGCCAGTGTGGCGGACGACCAACTCGCGCATCGATCGGACGCTGCTTCGAGCGC 201
QY 456 CGGTGTGTGTCGCGGSAAGCGCGCGAGGTGAGTACGTGCCCTCGTCCGAGTGGAC 515
Db 200 CGGTGTGTGTCGCGGCAAGCGCGCGAGGTGAGTACGTGCCCTCGTCCGTTGAGTGGAC 141
QY 516 TACATGGAGCTGTGCGCGCGGACGATGTCGCTGGCGCACCGCGATGATCCGTTCTTC 575
Db 140 TACATGGAGCTGTGCGCGCGGACGATGTCGCTGGCGCACCGCGATGATCCGTTCTTC 81
QY 576 GAGCACGACGACCAACCGTCCCTGATGGCGGCAACATCGACGCGCGAGCGGTTCG 635
Db 80 GAGCACGACGACCAACCGTCCCTCATGGGGCAACATCGACGCGCGAGGCGGTTCG 21
QY 636 CTGGTGGCGAGGAGCGCC 655
Db 20 CTGGTCCGTAGCGAGGCGCC 1

RESULT 14

US-08-757-653-136

; Sequence 136, Application US/08757653

; Patent No. 5843669

; GENERAL INFORMATION:

; APPLICANT: Kaiser, Michael W.

; APPLICANT: Lyamichev, Victor I.

; APPLICANT: Lyamichev, Natasha

; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using

; TITLE OF INVENTION: Thermolabile FEN-1 Endonucleases

; NUMBER OF SEQUENCES: 190

```
;
;
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 136:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-136
;
; Query Match 74.4%; Score 524.8; DB 2; Length 620;
; Best Local Similarity 89.7%; Pred. No. 4.4e-95;
; Matches 556; Conservative 6; Mismatches 58; Indels 0; Gaps 0;
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; QY 36 ATCAACATCCGTCGTCGCGCGGATCAAGAGGTTCTTCGGCACAGCCAGCTGTCC 95
; DB 1 ATCAACATCCGCGGTGTCGCGCGATCAAGAGTTCTTCGGCACAGCCAGCTGAGC 60
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; QY 96 CAGTTATGACACAGAACAAACCCGCTGTGGGTCTGACCCACAAAGCGCGCTGTGCGG 155
; DB 61 CAATTATGACACAGAACAAACCCGCTGTGGGTCTGACCCACAAAGCGCGCTGTGCGG 120
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; QY 156 CTGGGCGCGGTGTGTCTCCGGGAGCGCGGCTGTGAGGTCTCGTACGTCGACCCG 215
; DB 121 CTGGGCGCGGTGTGTCTCACGTGAGCTGCGCGGTGTGAGGTCTCGGAGTCCGCGACCCG 180
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; QY 216 TCSACTACGCGCGGATGTCCCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
; DB 181 TCGACTACGCGCGGATGTCCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
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; QY 276 GGCTCGCTGCTGATGAGCGCGGTSAACCCGTTGCGGTTTCATCGAGACCCGCTACCGC 335
;
;
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 137:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-137
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; Query Match 74.4%; Score 524.8; DB 2; Length 620;
; Best Local Similarity 89.7%; Pred. No. 4.4e-95;
; Matches 556; Conservative 6; Mismatches 58; Indels 0; Gaps 0;
;
; QY 36 ATCAACATCCGTCGTCGCGCGGATCAAGAGGTTCTTCGGCACAGCCAGCTGTCC 95
; DB 1 ATCAACATCCGCGGTGTCGCGCGATCAAGAGTTCTTCGGCACAGCCAGCTGAGC 60
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; QY 96 CAGTTATGACACAGAACAAACCCGCTGTGGGTCTGACCCACAAAGCGCGCTGTGCGG 155
; DB 61 CAATTATGACACAGAACAAACCCGCTGTGGGTCTGACCCACAAAGCGCGCTGTGCGG 120
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; QY 156 CTGGGCGCGGTGTGTCTCCGGGAGCGCGGCTGTGAGGTCTCGTACGTCGACCCG 215
; DB 121 CTGGGCGCGGTGTGTCTCACGTGAGCTGCGCGGTGTGAGGTCTCGGAGTCCGCGACCCG 180
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; QY 216 TCSACTACGCGCGGATGTGCGCGATCGAGACCCCGAGGGTCCCAACATCGGTCTGATC 275
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; QY 276 GGCTCGCTGCTGATGAGCGCGGTSAACCCGTTGCGGTTTCATCGAGACCCGCTACCGC 335
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; DB 241 GGCTCGCTGCTGATGAGCGCGGTSAACCCGTTGCGGTTTCATCGAAACCGCGCTACCGC 300
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; QY 336 AAGTGTGTGACCGGTGTGTGTACCGAGATTCACCTACCTGACCGCGCGAGGAGGAC 395
; DB 301 AAGTGTGTGACCGGTGTGTGTAGCAGCAGATCGTGTACCTGACCGCGAGGAGGAC 360
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; QY 396 CGGCACGTSGTGGCGAGGCAACTCCCGATCGACGACAAAGGGCGGGTTCGAGGAGKCC 455
; DB 361 CGGCACGTSGTGGCGAGGCAACTCCCGATCGATCGGACGGTTCGTCGTGAGGAGCG 420
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; QY 456 CGGTGCTGTGCGCGAGGCGGCGAGGTGAGTACGTGCGCTCGTCCGAGTGGAC 515
; DB 421 CGGTGCTGTGCGCGAGGCGGCGAGGTGAGTACGTGCGCTCGTCCGAGTGGAC 480
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; QY 516 TACATGACGCTGTGCGCGCGCAGATGCTGCGGTGGCCACCGGATGATCCCGTTCTCTC 575
; DB 481 TACATGACGCTGTGCGCGCGCAGATGCTGCGGTGGCCACCGGATGATTCCTCTCTG 540
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; QY 576 GAGCACGACGACCAACCGTGTGCGCTGATGGGCCCAACATGACAGCGCGGCGGTTCG 635
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Db      421  CGCGTGTGTCGCGCGCAAGCGGCGGAGGTGAGTACGTGCCCTCGTCTGAGGTGGAC 480
QY      516  TACATGAGGTGTGCGCGCGCCAGATGGTGTGGTGGCCACCGCGATGATCCCGTTCTTC 575
Db      481  TACATGAGGTGTGCGCGCGCCAGATGGTGTGGTGGCCACCGCGATGATCCCGTTCTTC 540
QY      576  GAGCAGCAGCAGCCCAACCGTGCCTGATGGGCGCCAAACATGACGCGCCAGCGGTTCCG 635
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

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(without alignments)
8488.468 Million cell updates/sec

Title: US-09-285-306-10

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Sequence: 1 ccaggagctggaggcgtac.....ggcgatcgagcgaggacgt 705

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Gapop 10.0 , Gapext 1.0

Searched: 3228839 seqs, 245606551 residues

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Post-processing: Minimum Match 0%

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- 19: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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4	691	98.0	705	9	US-09-285-306-6
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6	691	98.0	705	9	US-09-285-306-8
7	691	98.0	705	9	US-09-285-306-9
8	691	98.0	705	9	US-09-285-306-12
9	691	98.0	705	9	US-09-285-306-13
10	691	98.0	705	9	US-09-285-306-14
11	691	98.0	705	9	US-09-285-306-16
12	691	98.0	705	9	US-09-285-306-24
13	691	98.0	705	9	US-09-285-306-17
14	691	98.0	705	9	US-09-285-306-3

15	683	96.9	705	9	US-09-285-306-11	Sequence 11, Appl
16	677	96.0	3444	13	US-10-282-122A-25737	Sequence 25737, A
17	675	95.7	705	9	US-09-285-306-87	Sequence 87, Appl
18	675	95.7	705	9	US-09-285-306-88	Sequence 88, Appl
19	675	95.7	705	9	US-09-285-306-90	Sequence 90, Appl
20	675	95.7	705	9	US-09-285-306-92	Sequence 92, Appl
21	675	95.7	705	9	US-09-285-306-96	Sequence 96, Appl
22	673.4	95.5	705	9	US-09-285-306-84	Sequence 84, Appl
23	673.4	95.5	705	9	US-09-285-306-86	Sequence 86, Appl
24	673.4	95.5	705	9	US-09-285-306-93	Sequence 93, Appl
25	673.4	95.5	705	9	US-09-285-306-94	Sequence 94, Appl
26	673.4	95.5	705	9	US-09-285-306-95	Sequence 95, Appl
27	673	95.5	687	9	US-09-285-306-18	Sequence 18, Appl
28	673	95.5	687	9	US-09-285-306-19	Sequence 19, Appl
29	673	95.5	687	9	US-09-285-306-20	Sequence 20, Appl
30	673	95.5	687	9	US-09-285-306-21	Sequence 21, Appl
31	673	95.5	687	9	US-09-285-306-22	Sequence 22, Appl
32	673	95.5	687	9	US-09-285-306-23	Sequence 23, Appl
33	673	95.5	687	9	US-09-285-306-25	Sequence 25, Appl
34	673	95.5	687	9	US-09-285-306-27	Sequence 27, Appl
35	671.8	95.3	705	9	US-09-285-306-85	Sequence 85, Appl
36	671.8	95.3	705	9	US-09-285-306-89	Sequence 89, Appl
37	671.8	95.3	705	9	US-09-285-306-91	Sequence 91, Appl
38	668.6	94.8	705	9	US-09-285-306-143	Sequence 143, App
39	667	94.6	705	9	US-09-285-306-144	Sequence 144, App
40	657	93.2	687	9	US-09-285-306-100	Sequence 100, App
41	655.8	93.0	705	9	US-09-285-306-181	Sequence 181, App
42	655.4	93.0	687	9	US-09-285-306-99	Sequence 99, Appl
43	653.8	92.7	687	9	US-09-285-306-98	Sequence 98, Appl
44	652.2	92.5	687	9	US-09-285-306-97	Sequence 97, Appl
45	650.6	92.3	687	9	US-09-285-306-146	Sequence 146, App

ALIGNMENTS

RESULT 1

US-09-285-306-10
; Sequence 10, Application US/09285306A
; Publication NO. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 10
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; US-09-285-306-10

Query Match		99.6%	Score 702.2;	DB 9;	Length 705;
Best Local Similarity		100.0%	Pred. No. 1.1e-154;		
Matches 705;		Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
QY	1	CCAGGAGCTGGAGCGGATCAACCGGAGACCCCTGATCAACATCCGTCCTCGTGGCGG	60		
DB	1	CCAGGAGCTGGAGCGGATCAACCGGAGACCCCTGATCAACATCCGTCCTCGTGGCGG	60		
QY	61	CGATCAAGGAGTCTTCGGCACCAGCCAGCTGTCCAGTTCATGACCAACACCCGC	120		
DB	61	CGATCAAGGAGTCTTCGGCACCAGCCAGCTGTCCAGTTCATGACCAACACCCGC	120		
QY	121	TGTCGGGTCTGACCCACAAGCGCCCTGTGCGGCTGGCCGGTGTGTGTCTGTCCCGG	180		
DB	121	TGTCGGGTCTGACCCACAAGCGCCCTGTGCGGCTGGCCGGTGTGTGTCTGTCTCCCGG	180		

181 AGCGGGCGGCTCGAGTCCGTGACGTGACCGCTGSCACTACGCGCGGATGCCCCGA 240
 181 AGCGGGCGGCTCGAGTCCGTGACGTGACCGCTGSCACTACGCGCGGATGCCCCGA 240
 241 TCAGAGCCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCTGATGCGGGGG 300
 241 TCAGAGCCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCTGATGCGGGGG 300
 301 TSAACCCGTTCCGCTTCATCGAGACCCCGTACCGAAGGTGGTTCGACGGTGTGTCACCG 360
 301 TSAACCCGTTCCGCTTCATCGAGACCCCGTACCGAAGGTGGTTCGACGGTGTGTCACCG 360
 361 ACAGATCCACTACTACCTGACCGCGAGAGGAGGACCCCGACCGTGGTGGCGAGGCCAACT 420
 361 ACAGATCCACTACTACCTGACCGCGAGAGGAGGACCCCGACCGTGGTGGCGAGGCCAACT 420
 421 CGCGGATCGAGCAAGGGCGGGTTCGAGGAGKCCCGGGTCTGGTCCGCGSAAAGCGG 480
 421 CGCGGATCGAGCAAGGGCGGGTTCGAGGAGKCCCGGGTCTGGTCCGCGSAAAGCGG 480
 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA 540
 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA 540
 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGACCGCAACCGTGCCC 600
 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGACCGCAACCGTGCCC 600
 601 TGATGGGGCGCAACATCGAGCGCCAGCGGTTCGCTGGTTCGCGAGGCGCGCGCTGG 660
 601 TGATGGGGCGCAACATCGAGCGCCAGCGGTTCGCTGGTTCGCGAGGCGCGCGCTGG 660
 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGGCGGACGT 705
 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGGCGGACGT 705

RESULT 2
 US-09-285-306-4
 ; Sequence 4, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingeras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 4
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-4

Query Match 98.0%; Score 691; DB 9; Length 705;
 Best Local Similarity 98.0%; Pred. No. 4.6e-152;
 Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;
 QY 1 CCCAGGAGTGGAGCGGATCAACCGCAGACCCCTGATCAACATCCGTCCCGTGGGGG 60
 Db 1 CCCAGGAGTGGAGCGGATCAACCGCAGACCCCTGATCAACATCCGTCCCGTGGGGG 60
 QY 61 CGATCAAGAGGTCTTCGGGACCGCAGCGTGTCCAGTTTCATGACAGCAACCCCGC 120
 Db 61 CGATCAAGAGGTCTTCGGGACCGCAGCGTGTCCAGTTTCATGACAGCAACCCCGC 120
 QY 121 TGTGGGCTGTACCCACAAAGCGCGCTGTGCGGCTGGGCGCGGTGGTCTGTCCCGGG 180

121 TGTGGGCTGTACCCACAAAGCGCGCTGTGCGGCTGGGCGGTGCTGTCCCGGG 180
 181 AGCGGGCGGCTCGAGTCCGTGACGTGACCGCTGSCACTACGCGCGGATGCCCCGA 240
 181 AGCGGGCGGCTCGAGTCCGTGACGTGACCGCTGSCACTACGCGCGGATGCCCCGA 240
 241 TCAGAGCCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCTGATGCGGGGG 300
 241 TCAGAGCCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGCTGATGCGGGGG 300
 301 TSAACCCGTTCCGCTTCATCGAGACCCCGTACCGAAGGTGGTTCGACGGTGTGTCACCG 360
 301 TSAACCCGTTCCGCTTCATCGAGACCCCGTACCGAAGGTGGTTCGACGGTGTGTCACCG 360
 361 ACAGATCCACTACTACCTGACCGCGAGAGGAGGACCCCGACCGTGGTGGCGAGGCCAACT 420
 361 ACAGATCCACTACTACCTGACCGCGAGAGGAGGACCCCGACCGTGGTGGCGAGGCCAACT 420
 421 CGCGGATCGAGCAAGGGCGGGTTCGAGGAGKCCCGGGTCTGGTCCGCGSAAAGCGG 480
 421 CGCGGATCGAGCAAGGGCGGGTTCGAGGAGKCCCGGGTCTGGTCCGCGSAAAGCGG 480
 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA 540
 481 GCGAGGTCGAGTACGTGCCCTCGTCCGAGGTGGACTACATGGAAGTGTGCGCGCGCCAGA 540
 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGACCGCAACCGTGCCC 600
 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGACCGCAACCGTGCCC 600
 601 TGATGGGGCGCAACATCGAGCGCCAGCGGTTCGCTGGTTCGCGAGGCGCGCGCTGG 660
 601 TGATGGGGCGCAACATCGAGCGCCAGCGGTTCGCTGGTTCGCGAGGCGCGCGCTGG 660
 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGGCGGACGT 705
 661 TGGGCACCGCATGGAGCTGCGCGCGCGATCGACGGCGGACGT 705

RESULT 3
 US-09-285-306-5
 ; Sequence 5, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingeras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 5
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 US-09-285-306-5

Query Match 98.0%; Score 691; DB 9; Length 705;
 Best Local Similarity 98.0%; Pred. No. 4.6e-152;
 Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;
 QY 1 CCCAGGAGTGGAGCGGATCAACCGCAGACCCCTGATCAACATCCGTCCCGTGGGGG 60
 Db 1 CCCAGGAGTGGAGCGGATCAACCGCAGACCCCTGATCAACATCCGTCCCGTGGGGG 60
 QY 61 CGATCAAGAGGTCTTCGGGACCGCAGCGTGTCCAGTTTCATGACAGCAACCCCGC 120
 Db 61 CGATCAAGAGGTCTTCGGGACCGCAGCGTGTCCAGTTTCATGACAGCAACCCCGC 120

QY 121 TGTCTGGTCTGACCCACAGAGCGCCCTGTCGGCGCTGGCCCGGGTGTCTGTCCCGGG 180
 Db 121 TGTCTGGGCTTACCCACAGAGCGCCCTGTCGGCGCTGGCCCGGGTGTCTGTCCCGGG 180
 QY 181 AGCGGGCCGGCTGGAGGTCCCGTGCAGTGCACCCGCTCSCACTACGGCCGGATGTGCCGA 240
 Db 181 AGCGGGCCGGCTGGAGGTCCCGTGCAGTGCACCCGCTCSCACTACGGCCGGATGTGCCGA 240
 QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTTCGCTGCGGTGTAYGCGCGG 300
 Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTTCGCTGCGGTGTATGCGCGG 300
 QY 301 TSAACCCCGTTCGGGTTCATCGAGACCCCGTTCAGAGAGCGGAGGACCGCCACTGTCGCGAGGCAACT 420
 Db 301 TCAACCCCGTTCGGGTTCATCGAGAGCGGAGGACCGCCACTGTCGCGAGGCAACT 420
 QY 361 AGGATCCACTACCTGACCGCGGAGGAGGACCGCCACTGTCGCGAGGCAACT 420
 Db 361 AGGATCCACTACCTGACCGCGGAGGAGGACCGCCACTGTCGCGAGGCAACT 420
 QY 421 CGCGATCGACGACAAAGGCGGTTTCGAGGAGKCCCGGTTGTCGCGCGSAAAGCGG 480
 Db 421 CGCGATCGACGACAAAGGCGGTTTCGAGGAGKCCCGGTTGTCGCGCGSAAAGCGG 480
 QY 481 GCGAGGTGAGTACGTGCTCGTCCGAGGTGGAATACATGACAGTGTGCGCGCCAGA 540
 Db 481 GCGAGGTGAGTACGTGCTCGTCCGAGGTGGAATACATGACAGTGTGCGCGCCAGA 540
 QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGCAGTGC 600
 Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGCAGTGC 600
 QY 601 TGATGGCGCCCAATGATGAGCCAGGCGGTTCCGCTGTCGTCGAGGAGGCGCGCTGG 660
 Db 601 TGATGGCGCCCAATGATGAGCCAGGCGGTTCCGCTGTCGTCGAGGAGGCGCGCTGG 660
 QY 661 TGGGCACCGCATGAGTGTGCGCGCGCGATCGAGCGCGGACGT 705
 Db 661 TGGGCACCGCATGAGTGTGCGCGCGCGATCGAGCGCGGACGT 705

RESULT 4

us-09-285-306-6
 ; Sequence 6, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gieras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; EARLIER FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 6
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 us-09-285-306-6

Query Match 98.0%; Score 691; DB 9; Length 705;
 Best Local Similarity 98.0%; Pred. No. 4.6e-152;
 Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;
 QY 1 CCCAGGAGTGGAGCGATCACCGAGACCCCTGATCAACATCGTTCCTGTCGTCGGG 60
 Db 1 CCCAGGAGTGGAGCGATCACCGAGACCCCTGATCAACATCGTTCCTGTCGTCGGG 60
 QY 61 CGATCAAGAGTCTTTCGGCACCGACCGAGCTGCCAGTTCATGGACCAACACCGC 120

Db 61 CGATCAAGAGTCTTTCGGCACCGACCGAGCTGCCAGTTCATGGACCAACACCGC 120
 QY 121 TGTCTGGTCTGACCCACAGAGCGCCCTGTCGGCGCTGGCCCGGGTGTCTGTCCCGGG 180
 Db 121 TGTCTGGGCTTACCCACAGAGCGCCCTGTCGGCGCTGGCCCGGGTGTCTGTCCCGGG 180
 QY 181 AGCGGGCCGGCTGGAGGTCCCGTGCAGTGCACCCGCTCSCACTACGGCCGGATGTGCCGA 240
 Db 181 AGCGGGCCGGCTGGAGGTCCCGTGCAGTGCACCCGCTCSCACTACGGCCGGATGTGCCGA 240
 QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTTCGCTGCGGTGTAYGCGCGG 300
 Db 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGTTCGCTGCGGTGTATGCGCGG 300
 QY 301 TSAACCCCGTTCGGGTTCATCGAGACCCCGTTCAGAGAGCGGAGGACCGCCACTGTCGCGAGGCAACT 420
 Db 301 TCAACCCCGTTCGGGTTCATCGAGAGCGGAGGACCGCCACTGTCGCGAGGCAACT 420
 QY 361 AGGATCCACTACCTGACCGCGGAGGAGGACCGCCACTGTCGCGAGGCAACT 420
 Db 361 AGGATCCACTACCTGACCGCGGAGGAGGACCGCCACTGTCGCGAGGCAACT 420
 QY 421 CGCGATCGACGACAAAGGCGGTTTCGAGGAGKCCCGGTTGTCGCGCGSAAAGCGG 480
 Db 421 CGCGATCGACGACAAAGGCGGTTTCGAGGAGKCCCGGTTGTCGCGCGSAAAGCGG 480
 QY 481 GCGAGGTGAGTACGTGCTCGTCCGAGGTGGAATACATGACAGTGTGCGCGCCAGA 540
 Db 481 GCGAGGTGAGTACGTGCTCGTCCGAGGTGGAATACATGACAGTGTGCGCGCCAGA 540
 QY 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGTGC 600
 Db 541 TGGTGTGGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCAGCAGCAGTGC 600
 QY 601 TGATGGCGCCCAATGATGAGCCAGGCGGTTCCGCTGTCGTCGAGGAGGCGCGCTGG 660
 Db 601 TGATGGCGCCCAATGATGAGCCAGGCGGTTCCGCTGTCGTCGAGGAGGCGCGCTGG 660
 QY 661 TGGGCACCGCATGAGTGTGCGCGCGCGATCGAGCGCGGACGT 705
 Db 661 TGGGCACCGCATGAGTGTGCGCGCGCGATCGAGCGCGGACGT 705

RESULT 5

us-09-285-306-7
 ; Sequence 7, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gieras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; EARLIER FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 7
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 us-09-285-306-7

Query Match 98.0%; Score 691; DB 9; Length 705;
 Best Local Similarity 98.0%; Pred. No. 4.6e-152;
 Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;
 QY 1 CCCAGGAGTGGAGCGATCACCGAGACCCCTGATCAACATCGTTCCTGTCGTCGGG 60
 Db 1 CCCAGGAGTGGAGCGATCACCGAGACCCCTGATCAACATCGTTCCTGTCGTCGGG 60

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QY 61 CGATCAAGAGATTCTTTCGGACACAGCCAGCTGTCCAGTTCATGACCAAGAAACAACCCGC 120
DB 61 CGATCAAGAGATTCTTTCGGACACAGCCAGCTGTCCAGTTCATGACCAAGAAACAACCCGC 120
QY 121 TGTCCGGTCTGACCAACAGCCGCGCTGTCCGGCTTGGCCCGGGTGGTCTGTCCCGGG 180
DB 121 TGTCCGGGCTCACCCAAAGCCGCGCTGTCCGGCTTGGCCCGGGTGGTCTGTCCCGGG 180
QY 181 AGCGGCGCGCTTGGAGTCCGTGACGTGCACCCGCTCSCACTACGGCCGGATGTGCCGA 240
DB 181 AGCGGCGCGCTTGGAGTCCGTGACGTGCACCCGCTCSCACTACGGCCGGATGTGCCGA 240
QY 241 TCAGACCCCGAGGGTCCCAACATCGGTGTGATCGGCTCGCTGTGCGGTATGCGCGGG 300
DB 241 TCAGACCCCGAGGGTCCCAACATCGGTGTGATCGGCTCGCTGTGCGGTATGCGCGGG 300
QY 301 TSAACCGTTTCGGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACGGTGTGTACCG 360
DB 301 TSAACCGTTTCGGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACGGTGTGTACCG 360
QY 361 ACAGATCCACTACCTGACCGCCGACGAGGAGGACCGCCACGTGTCGTCGCGCAGGCCAACT 420
DB 361 ACAGATCCACTACCTGACCGCCGACGAGGAGGACCGCCACGTGTCGTCGCGCAGGCCAACT 420
QY 421 CGCGCATCGACGACAAAGGGCCGTTTCGAGAGKCCCGGGTGTGTCGTCGCGCAAGGCGG 480
DB 421 CGCGCATCGACGACAAAGGGCCGTTTCGAGAGKCCCGGGTGTGTCGTCGCGCAAGGCGG 480
QY 481 GCAGAGTTCGAGTACGTGTCCTCGAGTGGACTACATGAGCTGTCCCGCGCCAGA 540
DB 481 GCAGAGTTCGAGTACGTGTCCTCGAGTGGACTACATGAGCTGTCCCGCGCCAGA 540
QY 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCCCAACCGTGC 600
DB 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCCCAACCGTGC 600
QY 601 TGATGGCGCCCAACATCGAGCGCCGCTTCCGCTGTGTCGCGAGCGCGCGCTGG 660
DB 601 TGATGGCGCCCAACATCGAGCGCCGCTTCCGCTGTGTCGCGAGCGCGCGCTGG 660
QY 661 TGGCACCGCATGGAGCTCGCGCGCGATCGACGCGCGACGT 705
DB 661 TGGCACCGCATGGAGCTCGCGCGCGATCGACGCGCGACGT 705

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RESULT 6
US-09-285-306-8
; Sequence 8, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-8

Query Match 98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 4.6e-152;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

QY 1 CCCAGAGCTGGAGCGCATCACCCAGACCCCTGATCAACATCCGTCAGTCTGTGGCG 60
DB 61 CGATCAAGAGATTCTTTCGGACACAGCCAGCTGTCCAGTTCATGACCAAGAAACAACCCGC 120
DB 61 CGATCAAGAGATTCTTTCGGACACAGCCAGCTGTCCAGTTCATGACCAAGAAACAACCCGC 120
QY 121 TGTCCGGTCTGACCAACAGCCGCGCTGTCCGGCTTGGCCCGGGTGGTCTGTCCCGGG 180
DB 121 TGTCCGGGCTCACCCAAAGCCGCGCTGTCCGGCTTGGCCCGGGTGGTCTGTCCCGGG 180
QY 181 AGCGGCGCGCTTGGAGTCCGTGACGTGCACCCGCTCSCACTACGGCCGGATGTGCCGA 240
DB 181 AGCGGCGCGCTTGGAGTCCGTGACGTGCACCCGCTCSCACTACGGCCGGATGTGCCGA 240
QY 241 TCAGACCCCGAGGGTCCCAACATCGGTGTGATCGGCTCGCTGTGCGGTATGCGCGGG 300
DB 241 TCAGACCCCGAGGGTCCCAACATCGGTGTGATCGGCTCGCTGTGCGGTATGCGCGGG 300
QY 301 TSAACCGTTTCGGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACGGTGTGTACCG 360
DB 301 TSAACCGTTTCGGGTTTCATCGAGACCCCGTACCGCAAGGTGGTTCGACGGTGTGTACCG 360
QY 361 ACAGATCCACTACCTGACCGCCGACGAGGAGGACCGCCACGTGTCGTCGCGCAGGCCAACT 420
DB 361 ACAGATCCACTACCTGACCGCCGACGAGGAGGACCGCCACGTGTCGTCGCGCAGGCCAACT 420
QY 421 CGCGCATCGACGACAAAGGGCCGTTTCGAGAGKCCCGGGTGTGTCGTCGCGCAAGGCGG 480
DB 421 CGCGCATCGACGACAAAGGGCCGTTTCGAGAGKCCCGGGTGTGTCGTCGCGCAAGGCGG 480
QY 481 GCAGAGTTCGAGTACGTGTCCTCGAGTGGACTACATGAGCTGTCCCGCGCCAGA 540
DB 481 GCAGAGTTCGAGTACGTGTCCTCGAGTGGACTACATGAGCTGTCCCGCGCCAGA 540
QY 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCCCAACCGTGC 600
DB 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGCAGCCCAACCGTGC 600
QY 601 TGATGGCGCCCAACATCGAGCGCCGCTTCCGCTGTGTCGCGAGCGCGCGCTGG 660
DB 601 TGATGGCGCCCAACATCGAGCGCCGCTTCCGCTGTGTCGCGAGCGCGCGCTGG 660
QY 661 TGGCACCGCATGGAGCTCGCGCGCGATCGACGCGCGACGT 705
DB 661 TGGCACCGCATGGAGCTCGCGCGCGATCGACGCGCGACGT 705

```

QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCRGTGCTGGCGG 60
 Db |||||
 QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCRGTGCTGGCGG 60
 Db |||||
 QY 61 CGATCAAGGAGTTCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGGACCAAGAAACACCCGC 120
 Db |||||
 QY 61 CGATCAAGGAGTTCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGGACCAAGAAACACCCGC 120
 Db |||||
 QY 121 TGTCCGGTCTGACCAACAGCCCGCTGTGCGCGTGTGGCCCGGGTGTCTGTCCCGGG 180
 Db |||||
 QY 121 TGTCCGGTCTGACCAACAGCCCGCTGTGCGCGTGTGGCCCGGGTGTCTGTCCCGGG 180
 Db |||||
 QY 181 AGCGGCGCGGCTGAGGTCCTGAGTCCGTCAGTGCACCCGTCSCACTACGCGCGGATGTGCCGA 240
 Db |||||
 QY 181 AGCGGCGCGGCTGAGGTCCTGAGTCCGTCAGTGCACCCGTCSCACTACGCGCGGATGTGCCGA 240
 Db |||||
 QY 241 TCGAGACCCCGGAGGTTCCCAACATCGGTCGTGATCGGCTCGCTGTGCTGTATGCGCGGG 300
 Db |||||
 QY 241 TCGAGACCCCGGAGGTTCCCAACATCGGTCGTGATCGGCTCGCTGTGCTGTATGCGCGGG 300
 Db |||||
 QY 301 TSAACCGGTCGGGTTTCATCGAGACCCCGTACCGAAGGTGTGCGAGTGTGCTCAACCG 360
 Db |||||
 QY 301 TSAACCGGTCGGGTTTCATCGAGACCCCGTACCGAAGGTGTGCGAGTGTGCTCAACCG 360
 Db |||||
 QY 361 ACGAGATCCACTACCTGACCGCGGAGGAGGACCGCCACGTSGTGGCGGCAACT 420
 Db |||||
 QY 361 ACGAGATCCACTACCTGACCGCGGAGGAGGACCGCCACGTSGTGGCGGCAACT 420
 Db |||||
 QY 421 CGCCGATCGACCAAGGCGCGTTTCGAGAGKCCCGGTTGCTGTCCCGGSAAGCGG 480
 Db |||||
 QY 421 CGCCGATCGACCAAGGCGCGTTTCGAGAGKCCCGGTTGCTGTCCCGGSAAGCGG 480
 Db |||||
 QY 481 GCGAGTTCAGTACGTCCTGTGCGAGGTGGAATACATGAGACGTGTCCCGCGCCAGA 540
 Db |||||
 QY 481 GCGAGTTCAGTACGTCCTGTGCGAGGTGGAATACATGAGACGTGTCCCGCGCCAGA 540
 Db |||||
 QY 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCGCTGG 600
 Db |||||
 QY 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCGCTGG 600
 Db |||||
 QY 601 TGATGGCGCCAAATGACGCGCCAGGCGTTCCGCTGTGCGAGCGGCGCTGG 660
 Db |||||
 QY 601 TGATGGCGCCAAATGACGCGCCAGGCGTTCCGCTGTGCGAGCGGCGCTGG 660
 Db |||||
 QY 661 TGGGCAACCGGATGAGCTGCGCGGCGATCGAGCGGCGACGT 705
 Db |||||
 QY 661 TGGGCAACCGGATGAGCTGCGCGGCGATCGAGCGGCGACGT 705
 Db |||||

RESULT 8

US-09-285-306-12
 ; Sequence 12, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingers, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affimetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SEQ ID NO 12
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium

Query Match 98.0%; Score 691; DB 9; Length 705;

Best Local Similarity 98.0%; Pred. No. 4.6e-152;
 Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;
 QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCRGTGCTGGCGG 60
 Db |||||
 QY 1 CCAGGACGTGGAGGCGATCACACCGCAGACCTGATCAACATCCGTCRGTGCTGGCGG 60
 Db |||||
 QY 61 CGATCAAGGAGTTCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGGACCAAGAAACACCCGC 120
 Db |||||
 QY 61 CGATCAAGGAGTTCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGGACCAAGAAACACCCGC 120
 Db |||||
 QY 121 TGTCCGGTCTGACCAACAGCCCGCTGTGCGCGTGTGGCCCGGGTGTCTGTCCCGGG 180
 Db |||||
 QY 121 TGTCCGGTCTGACCAACAGCCCGCTGTGCGCGTGTGGCCCGGGTGTCTGTCCCGGG 180
 Db |||||
 QY 181 AGCGGCGCGGCTGAGGTCCTGAGTCCGTCAGTGCACCCGTCSCACTACGCGCGGATGTGCCGA 240
 Db |||||
 QY 181 AGCGGCGCGGCTGAGGTCCTGAGTCCGTCAGTGCACCCGTCSCACTACGCGCGGATGTGCCGA 240
 Db |||||
 QY 241 TCGAGACCCCGGAGGTTCCCAACATCGGTCGTGATCGGCTCGCTGTGCTGTATGCGCGGG 300
 Db |||||
 QY 241 TCGAGACCCCGGAGGTTCCCAACATCGGTCGTGATCGGCTCGCTGTGCTGTATGCGCGGG 300
 Db |||||
 QY 301 TSAACCGGTCGGGTTTCATCGAGACCCCGTACCGAAGGTGTGCGAGTGTGCTCAACCG 360
 Db |||||
 QY 301 TSAACCGGTCGGGTTTCATCGAGACCCCGTACCGAAGGTGTGCGAGTGTGCTCAACCG 360
 Db |||||
 QY 361 ACGAGATCCACTACCTGACCGCGGAGGAGGACCGCCACGTSGTGGCGGCAACT 420
 Db |||||
 QY 361 ACGAGATCCACTACCTGACCGCGGAGGAGGACCGCCACGTSGTGGCGGCAACT 420
 Db |||||
 QY 421 CGCCGATCGACCAAGGCGCGTTTCGAGAGKCCCGGTTGCTGTCCCGGSAAGCGG 480
 Db |||||
 QY 421 CGCCGATCGACCAAGGCGCGTTTCGAGAGKCCCGGTTGCTGTCCCGGSAAGCGG 480
 Db |||||
 QY 481 GCGAGTTCAGTACGTCCTGTGCGAGGTGGAATACATGAGACGTGTCCCGCGCCAGA 540
 Db |||||
 QY 481 GCGAGTTCAGTACGTCCTGTGCGAGGTGGAATACATGAGACGTGTCCCGCGCCAGA 540
 Db |||||
 QY 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCGCTGG 600
 Db |||||
 QY 541 TGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCAGCCGCTGG 600
 Db |||||
 QY 601 TGATGGCGCCAAATGACGCGCCAGGCGTTCCGCTGTGCGAGCGGCGCTGG 660
 Db |||||
 QY 601 TGATGGCGCCAAATGACGCGCCAGGCGTTCCGCTGTGCGAGCGGCGCTGG 660
 Db |||||
 QY 661 TGGGCAACCGGATGAGCTGCGCGGCGATCGAGCGGCGACGT 705
 Db |||||
 QY 661 TGGGCAACCGGATGAGCTGCGCGGCGATCGAGCGGCGACGT 705
 Db |||||

RESULT 9

US-09-285-306-13
 ; Sequence 13, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gingers, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affimetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SEQ ID NO 13
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium

US-09-285-306-13

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; ORGANISM: Mycobacterium avium
US-09-285-306-14

Query Match      98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 4.6e-152;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

QY 1 CCAGAGCGTGGAGGCGATCACACCGCAGAGCCCTGATCAACATCCGTCRGTGTCGCGG 60
DB 1 CCAGAGCGTGGAGGCGATCACACCGCAGAGCCCTGATCAACATCCGTCRGTGTCGCGG 60
QY 61 CGATCAAGAGGATCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGAGCAGAAACCCGC 120
DB 61 CGATCAAGAGGATCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGAGCAGAAACCCGC 120
QY 121 TGTGGGTCTGACCCCAAGCGCGCTGTGCGGCTGGGCGCGGTGCTGTCCCGGG 180
DB 121 TGTGGGCTTCAACCAAGCGCGCTGTGCGGCTGGGCGCGGTGCTGTCCCGGG 180
QY 181 AGCGGCGCGCTTGGAGTCCGTGACGTGCACCGTCCACTACGCGCGGATGTGCCGA 240
DB 181 AGCGGCGCGCTTGGAGTCCGTGACGTGCACCGTCCACTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGCGGG 300
DB 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGCGGG 300
QY 301 TSAACCCGTTGCGGTTTCATCGAGACCCCGTACCGAAGGTGGTTCGACGGTGTGTCACCG 360
DB 301 TSAACCCGTTGCGGTTTCATCGAGACCCCGTACCGAAGGTGGTTCGACGGTGTGTCACCG 360
QY 361 ACAGATCCACTACTGACCGCCAGCAGGAGGACCGCAGTGTGTGCGCGGCAACT 420
DB 361 ACAGATCCACTACTGACCGCCAGCAGGAGGACCGCAGTGTGTGCGCGGCAACT 420
QY 421 CGCGCATCGACGACAAAGGCGCGTTTCGAGGAGKCCCGGTTCTGTCGCGSAGGCGG 480
DB 421 CGCGCATCGACGACAAAGGCGCGTTTCGAGGAGKCCCGGTTCTGTCGCGSAGGCGG 480
QY 481 GCGAGGTGAGTACGTGCTTCGCGGCTTCGAGGAGTGGACTACATGAGCGTGTGCGCGCCAGA 540
DB 481 GCGAGGTGAGTACGTGCTTCGCGGCTTCGAGGAGTGGACTACATGAGCGTGTGCGCGCCAGA 540
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGACGCCAACCGTGC 600
DB 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGACGCCAACCGTGC 600
QY 601 TGATGGCGCCCAACATGACAGCGCCAGCGGTTCGCTGTCGCGAGCGAGCGCGCTGG 660
DB 601 TGATGGCGCCCAACATGACAGCGCCAGCGGTTCGCTGTCGCGAGCGAGCGCGCTGG 660
QY 661 TGGGACCGCGCATGAGTGTGCGCGCGGATCGAGCGCGGACGT 705
DB 661 TGGGACCGCGCATGAGTGTGCGCGCGGATCGAGCGCGGACGT 705

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RESULT 10
US-09-285-306-14
; Sequence 14, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Drenkow, Jorg
; APPLICANT: Gingeras, Thomas
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 14
; LENGTH: 705
; TYPE: DNA

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; ORGANISM: Mycobacterium avium
US-09-285-306-14

Query Match      98.0%; Score 691; DB 9; Length 705;
Best Local Similarity 98.0%; Pred. No. 4.6e-152;
Matches 691; Conservative 7; Mismatches 7; Indels 0; Gaps 0;

QY 1 CCAGAGCGTGGAGGCGATCACACCGCAGAGCCCTGATCAACATCCGTCRGTGTCGCGG 60
DB 1 CCAGAGCGTGGAGGCGATCACACCGCAGAGCCCTGATCAACATCCGTCRGTGTCGCGG 60
QY 61 CGATCAAGAGGATCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGAGCAGAAACCCGC 120
DB 61 CGATCAAGAGGATCTTTCGGCACCAGCCAGCTGTCCAGTTTCATGAGCAGAAACCCGC 120
QY 121 TGTGGGTCTGACCCCAAGCGCGCTGTGCGGCTGGGCGCGGTGCTGTCCCGGG 180
DB 121 TGTGGGCTTCAACCAAGCGCGCTGTGCGGCTGGGCGCGGTGCTGTCCCGGG 180
QY 181 AGCGGCGCGCTTGGAGTCCGTGACGTGCACCGTCCACTACGCGCGGATGTGCCGA 240
DB 181 AGCGGCGCGCTTGGAGTCCGTGACGTGCACCGTCCACTACGCGCGGATGTGCCGA 240
QY 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGCGGG 300
DB 241 TCGAGACCCCGAGGGTCCCAACATCGGTCTGATCGGCTCGCTGTGATGCGCGGG 300
QY 301 TSAACCCGTTGCGGTTTCATCGAGACCCCGTACCGAAGGTGGTTCGACGGTGTGTCACCG 360
DB 301 TSAACCCGTTGCGGTTTCATCGAGACCCCGTACCGAAGGTGGTTCGACGGTGTGTCACCG 360
QY 361 ACAGATCCACTACTGACCGCCAGCAGGAGGACCGCAGTGTGTGCGCGGCAACT 420
DB 361 ACAGATCCACTACTGACCGCCAGCAGGAGGACCGCAGTGTGTGCGCGGCAACT 420
QY 421 CGCGCATCGACGACAAAGGCGCGTTTCGAGGAGKCCCGGTTCTGTCGCGSAGGCGG 480
DB 421 CGCGCATCGACGACAAAGGCGCGTTTCGAGGAGKCCCGGTTCTGTCGCGSAGGCGG 480
QY 481 GCGAGGTGAGTACGTGCTTCGCGGCTTCGAGGAGTGGACTACATGAGCGTGTGCGCGCCAGA 540
DB 481 GCGAGGTGAGTACGTGCTTCGCGGCTTCGAGGAGTGGACTACATGAGCGTGTGCGCGCCAGA 540
QY 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGACGCCAACCGTGC 600
DB 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTTCGAGCAGACGACGCCAACCGTGC 600
QY 601 TGATGGCGCCCAACATGACAGCGCCAGCGGTTCGCTGTCGCGAGCGAGCGCGCTGG 660
DB 601 TGATGGCGCCCAACATGACAGCGCCAGCGGTTCGCTGTCGCGAGCGAGCGCGCTGG 660
QY 661 TGGGACCGCGCATGAGTGTGCGCGCGGATCGAGCGCGGACGT 705
DB 661 TGGGACCGCGCATGAGTGTGCGCGCGGATCGAGCGCGGACGT 705

```

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RESULT 11
US-09-285-306-16
; Sequence 16, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Drenkow, Jorg
; APPLICANT: Gingeras, Thomas
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 16
; TYPE: DNA

```


; CURRENT FILING DATE: 1998-04-02
; EARLIER FILING DATE: 1998-04-02
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 17
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
US-09-285-306-17

Query Match 97.8%; Score 689.4; DB 9; Length 705;
Best Local Similarity 97.9%; Pred. No. 1.1e-151;
Matches 690; Conservative 7; Mismatches 8; Indels 0; Gaps 0;
Qy 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCORGTCTGTGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCORGTCTGTGCGG 60
Qy 61 CGATCAAGGAGTCTTCGCGCACCGACGAGCTGTCCCAAGTTTCATGGACCAAGAACCCGC 120
Db 61 CGATCAAGGAGTCTTCGCGCACCGACGAGCTGTCCCAAGTTTCATGGACCAAGAACCCGC 120
Qy 121 TGTGCGGTCTGACCAACAGCGCGCTGTGCGGCGTGGGCGCGGTGGTCTGTGTCGCGG 180
Db 121 TGTGCGGCTCACCAACAGCGCGCTGTGCGGCGTGGGCGCGGTGGTCTGTGTCGCGG 180
Qy 181 AGCGGCGCGCTGGAGGTCGATGACGTGCACCGCTGSCACTACGCGCGGATGTGCCCGA 240
Db 181 AGCGGCGCGCTGGAGGTCGATGACGTGCACCGCTGSCACTACGCGCGGATGTGCCCGA 240
Qy 241 TCAGAGACCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGCGGTGTGTCGCGG 300
Db 241 TCAGAGACCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGCGGTGTGTCGCGG 300
Qy 301 TSAACCGCTTCGCGTTTCATCGAGACCCGTAACCGCAAGGTGGTTCGAGCGGTGTGTCACG 360
Db 301 TSAACCGCTTCGCGTTTCATCGAGACCCGTAACCGCAAGGTGGTTCGAGCGGTGTGTCACG 360
Qy 361 ACAGATGCCACTACTCGACCGCGATGATCCGTTCTCGAGCAGCAGCGACCGCAACCGTGC 420
Db 361 ACAGATGCCACTACTCGACCGCGATGATCCGTTCTCGAGCAGCAGCGACCGCAACCGTGC 420
Qy 421 CGCGATCGACGACCAAGGCGCGTTCGCGAGGCGCGGTGCTGTCGCGGCGCGCGG 480
Db 421 CGCGATCGACGACCAAGGCGCGTTCGCGAGGCGCGGTGCTGTCGCGGCGCGCGG 480
Qy 481 GCAGGTTCGAGTACGTGCTGTCGAGGTGGACTACATGGACNTTCTSCCGCGCCARA 540
Db 481 GCAGGTTCGAGTACGTGCTGTCGAGGTGGACTACATGGACNTTCTSCCGCGCCARA 540
Qy 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCGACCGACCGTGC 600
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCGACCGACCGTGC 600
Qy 601 TGATGGCGCCCAACATGACGCGCGGTTCGCGTGGTGGTGGTGGTGGTGGTGGTGG 660
Db 601 TGATGGCGCCCAACATGACGCGCGGTTCGCGTGGTGGTGGTGGTGGTGGTGGTGG 660
Qy 661 TGGGACCGGCGATGGAGCTGCGCGCGCGATGCGACGCGCGGACGT 705
Db 661 TGGGACCGGCGATGGAGCTGCGCGCGCGATGCGACGCGCGGACGT 705

RESULT 14

US-09-285-306-3
; Sequence 3, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700S
; CURRENT APPLICATION NUMBER: US/09/285.306A

; CURRENT FILING DATE: 1999-04-02
; EARLIER APLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 3
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium avium
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (525)...(525)
; OTHER INFORMATION: n = g,a,c or t
; FEATURE:
; NAME/KEY: modified base
; LOCATION: (650)...(650)
; OTHER INFORMATION: n = g,a,c or t
US-09-285-306-3

Query Match 96.9%; Score 683; DB 9; Length 705;
Best Local Similarity 96.9%; Pred. No. 3.4e-150;
Matches 683; Conservative 10; Mismatches 12; Indels 0; Gaps 0;
Qy 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCORGTCTGTGCGG 60
Db 1 CCCAGGACGTGGAGGCGATCACACCGCAGACCCCTGATCAACATCCGTCORGTCTGTGCGG 60
Qy 61 CGATCAAGGAGTCTTCGCGCACCGACGAGCTGTCCCAAGTTTCATGGACCAAGAACCCGC 120
Db 61 CGATCAAGGAGTCTTCGCGCACCGACGAGCTGTCCCAAGTTTCATGGACCAAGAACCCGC 120
Qy 121 TGTGCGGTCTGACCAACAGCGCGCTGTGCGGCGTGGGCGCGGTGGTCTGTGTCGCGG 180
Db 121 TGTGCGGCTCACCAACAGCGCGCTGTGCGGCGTGGGCGCGGTGGTCTGTGTCGCGG 180
Qy 181 AGCGGCGCGCTGGAGGTCGATGACGTGCACCGCTGSCACTACGCGCGGATGTGCCCGA 240
Db 181 AGCGGCGCGCTGGAGGTCGATGACGTGCACCGCTGSCACTACGCGCGGATGTGCCCGA 240
Qy 241 TCAGAGACCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGCGGTGTGTCGCGG 300
Db 241 TCAGAGACCCGAGGCTCCCAACATCGGTCTGATCGGCTCGCTGCGGTGTGTCGCGG 300
Qy 301 TSAACCGCTTCGCGTTTCATCGAGACCCGTAACCGCAAGGTGGTTCGAGCGGTGTGTCACG 360
Db 301 TSAACCGCTTCGCGTTTCATCGAGACCCGTAACCGCAAGGTGGTTCGAGCGGTGTGTCACG 360
Qy 361 ACAGATGCCACTACTCGACCGCGATGATCCGTTCTCGAGCAGCAGCGACCGCAACCGTGC 420
Db 361 ACAGATGCCACTACTCGACCGCGATGATCCGTTCTCGAGCAGCAGCGACCGCAACCGTGC 420
Qy 421 CGCGATCGACGACCAAGGCGCGTTCGCGAGGCGCGGTGCTGTCGCGGCGCGCGG 480
Db 421 CGCGATCGACGACCAAGGCGCGTTCGCGAGGCGCGGTGCTGTCGCGGCGCGCGG 480
Qy 481 GCAGGTTCGAGTACGTGCTGTCGAGGTGGACTACATGGACNTTCTSCCGCGCCARA 540
Db 481 GCAGGTTCGAGTACGTGCTGTCGAGGTGGACTACATGGACNTTCTSCCGCGCCARA 540
Qy 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCGACCGACCGTGC 600
Db 541 TGGTGTGCGTGGCCACCGCGATGATCCCGTTCTCGAGCAGCAGCGACCGACCGTGC 600
Qy 601 TGATGGCGCCCAACATGACGCGCGGTTCGCGTGGTGGTGGTGGTGGTGGTGGTGG 660
Db 601 TGATGGCGCCCAACATGACGCGCGGTTCGCGTGGTGGTGGTGGTGGTGGTGGTGG 660
Qy 661 TGGGACCGGCGATGGAGCTGCGCGCGCGATGCGACGCGCGGACGT 705
Db 661 TGGGACCGGCGATGGAGCTGCGCGCGCGATGCGACGCGCGGACGT 705

RESULT 15

US-09-285-306-11
 ; Sequence 11, Application US/09285306A
 ; Publication No. US20020187467A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Gengeras, Thomas
 ; APPLICANT: Drenkow, Jorg
 ; APPLICANT: Affymetrix, Inc.
 ; TITLE OF INVENTION: Mycobacterial rpoB Sequences
 ; FILE REFERENCE: 018547-018570US
 ; CURRENT APPLICATION NUMBER: US/09/285,306A
 ; CURRENT FILING DATE: 1999-04-02
 ; EARLIER APPLICATION NUMBER: US 60/080,616
 ; EARLIER FILING DATE: 1998-04-03
 ; NUMBER OF SEQ ID NOS: 181
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 11
 ; LENGTH: 705
 ; TYPE: DNA
 ; ORGANISM: Mycobacterium avium
 ; FEATURE:
 ; NAME/KEY: modified base
 ; LOCATION: (42)...(42)
 ; OTHER INFORMATION: n = g,a,c or t
 ; FEATURE:
 ; NAME/KEY: modified base
 ; LOCATION: (692)...(692)
 ; OTHER INFORMATION: n = g,a,c or t
 US-09-285-306-11

Query Match 96.9%; Score 683; DB 9; Length 705;
 Best Local Similarity 97.3%; Pred. No. 3.4e-150;
 Matches 686; Conservative 6; Mismatches 13; Indels 0; Gaps 0;
 QY 1 CCCAGAGCTGAGCGGATCACACCGAGACCCCTGATCAACATCCGTTCGTCGTGGGG 60
 Db 1 CCCAGAGCTGAGCGGATCACACCGAGACCCCTGATCAACNTCCGTCCGTCGTGGGG 60
 QY 61 CGATCAAGGAGTCTTCGGCACCGACCGAGCTGCCAGTTTCATGACCCAGACACACCGGC 120
 Db 61 CGATCAAGGAGTCTTCGGCACCGACCGAGTGTCCAGTTTCATGACCCAGACACACCGGC 120
 QY 121 TGTCCGGTCTGACCCACAAAGCCGCCCTGTCCGGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
 Db 121 TGTCCGGGCTCACCCACAAAGCCGCCCTGTCCGGCGCTGGGCCCGGGTGTCTGTCCCGGG 180
 QY 181 AGCGGGCCGGCTGAGTTCGGTACGTGACCGTCCAGTCCACCTACAGCCCGGAGTGCCTCGA 240
 Db 181 AGCGGGCCGGCTGAGTTCGGGATCCCGAGCTGCACCCCTCCCACTACCGCCGGATGTCCCGA 240
 QY 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGGTGTCGGTGTAYGCGCGGG 300
 Db 241 TCGAGACCCCGAGGTCCTCAACATCGGTCTGATCGGCTCGGTGTCGGTGTACGCGCGGG 300
 QY 301 TSAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGTGTGTGACCGTGTGTGTCACCG 360
 Db 301 TGAACCCGTTCCGGTTTCATCGAGACCCCGTACCGCAAGTGTGTGACCGCGTGTGTGTCACCG 360
 QY 361 ACAGATCCACTACTGACCGCCGACGAGGAGACCGCCAGTGTGTGCGAGGCGCAACT 420
 Db 361 ACAGATCCACTACTGACCGCCGACGAGGAGACCGCCAGTGTGTGCGAGGCGCAACT 420
 QY 421 CGCCGATCGACGACAAGGGCGGTTTCGAGGAGKCCCGGGTGTGTGTCGCGSAGGCGG 480
 Db 421 CGCCGATCGACGACAAGGGCGGTTTCGCGAGGCGGGTGTGTGTCGCGSAGGCGG 480
 QY 481 GCGAGGTCGAGTACGTGCTCCCTCGTCCGAGGTGGACTACATGACGATGTGCGCGGCCAGA 540
 Db 481 GCGAGGTCGAGTACGTGCTCCCTCGTCCGAGGTGGACTACATGACGATGTGCGCGGCCAGA 540
 QY 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGACGACGCCAACCGTGCCC 600
 Db 541 TGGTGTCCGTGGCCACCGCGATGATCCCGTTCCTCGAGCAGACGACGCCAACCGTGCCC 600

QY 601 TGATGGGGCCCAACATGACGCGCCAGGCGGTTCCGCTGTTGGCAGGAGGCCCGCTGG 660
 Db 601 TGATGGGGCCCAACATGACGCGCCAGGCGGTTCCGCTGTTGGCAGGAGGCCCGCTGG 660
 QY 661 TGGGCACCGGCAATGGAGCTGCGCGGGCGATCGACGCGGCGACGT 705
 Db 661 TGGGCACCGGCAATGGAGCTGCGCGGGCGATCGACGCGGCGACGT 705

Search completed: August 20, 2004, 01:36:45
 Job time : 409.972 secs

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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 14:25:11 ; Search time 162.256 Seconds
(without alignments)
8488.468 Million cell updates/sec

Title: US-09-285-306-2
Perfect score: 626
Sequence: 1 tccgtcccgctggtggcgcg.....aggctccgctggtcggtacc 626

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 1.0

Searched: 3228839 seqs, 2456066551 residues
Total number of hits satisfying chosen parameters: 6457678

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published Applications NA.*
1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq.*
2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq.*
3: /cgn2_6/ptodata/1/pubpna/US05_NEW_PUB.seq.*
4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq.*
5: /cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq.*
6: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq.*
7: /cgn2_6/ptodata/1/pubpna/US09_PUBCOMB.seq.*
8: /cgn2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq.*
9: /cgn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq.*
10: /cgn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq.*
11: /cgn2_6/ptodata/1/pubpna/US09D_PUBCOMB.seq.*
12: /cgn2_6/ptodata/1/pubpna/US09E_PUBCOMB.seq.*
13: /cgn2_6/ptodata/1/pubpna/US09F_PUBCOMB.seq.*
14: /cgn2_6/ptodata/1/pubpna/US09G_PUBCOMB.seq.*
15: /cgn2_6/ptodata/1/pubpna/US09H_PUBCOMB.seq.*
16: /cgn2_6/ptodata/1/pubpna/US09I_PUBCOMB.seq.*
17: /cgn2_6/ptodata/1/pubpna/US09J_PUBCOMB.seq.*
18: /cgn2_6/ptodata/1/pubpna/US09K_PUBCOMB.seq.*
19: /cgn2_6/ptodata/1/pubpna/US09L_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	626	100.0	626	9	US-09-285-306-2
2	626	100.0	626	9	US-09-285-306-47
3	621.2	99.2	626	9	US-09-285-306-45
4	621.2	99.2	626	9	US-09-285-306-46
5	582.8	93.1	626	9	US-09-285-306-39
6	581.2	92.8	626	9	US-09-285-306-30
7	579.6	92.6	626	9	US-09-285-306-40
8	578	92.3	626	9	US-09-285-306-33
9	578	92.3	626	9	US-09-285-306-38
10	574.8	91.8	626	9	US-09-285-306-31
11	574.8	91.8	626	9	US-09-285-306-36
12	574.8	91.8	626	9	US-09-285-306-37
13	574.8	91.8	626	9	US-09-285-306-41
14	574.8	91.8	626	9	US-09-285-306-42

15	574.8	91.8	626	9	US-09-285-306-43	Sequence 43, Appl
16	574.8	91.8	626	9	US-09-285-306-44	Sequence 44, Appl
17	574.8	91.8	643	9	US-09-285-306-34	Sequence 34, Appl
18	574.8	91.8	647	9	US-09-285-306-32	Sequence 32, Appl
19	550.8	88.0	705	9	US-09-285-306-35	Sequence 35, Appl
20	546.4	87.3	626	9	US-09-285-306-136	Sequence 136, App
21	546	87.2	626	9	US-09-285-306-133	Sequence 133, App
22	546	87.2	626	9	US-09-285-306-134	Sequence 134, App
23	544.6	87.0	626	9	US-09-285-306-135	Sequence 135, App
24	544.4	87.0	626	9	US-09-285-306-132	Sequence 132, App
25	539.6	86.2	687	9	US-09-285-306-48	Sequence 48, Appl
26	539.6	86.2	687	9	US-09-285-306-49	Sequence 49, Appl
27	534.8	85.4	705	9	US-09-285-306-155	Sequence 155, App
28	531.6	84.9	687	9	US-09-285-306-50	Sequence 50, Appl
29	526.8	84.2	687	9	US-09-285-306-26	Sequence 26, Appl
30	526.8	84.2	705	9	US-09-285-306-52	Sequence 52, Appl
31	526.4	84.1	687	9	US-09-285-306-59	Sequence 59, Appl
32	525.2	83.9	705	9	US-09-285-306-156	Sequence 156, App
33	523.6	83.6	687	9	US-09-285-306-58	Sequence 58, Appl
34	523.6	83.6	687	9	US-09-285-306-60	Sequence 60, Appl
35	523.6	83.6	687	9	US-09-285-306-158	Sequence 158, App
36	523.6	83.6	705	9	US-09-285-306-51	Sequence 51, Appl
37	523.6	83.6	705	9	US-09-285-306-57	Sequence 57, Appl
38	523.2	83.6	705	9	US-09-285-306-75	Sequence 75, Appl
39	522.2	83.4	626	9	US-09-285-306-53	Sequence 53, Appl
40	522	83.4	687	9	US-09-285-306-61	Sequence 61, Appl
41	522	83.4	687	9	US-09-285-306-62	Sequence 62, Appl
42	522	83.4	705	9	US-09-285-306-55	Sequence 55, Appl
43	522	83.4	705	9	US-09-285-306-153	Sequence 153, App
44	522	83.4	705	9	US-09-285-306-181	Sequence 181, App
45	521	83.2	626	9	US-09-285-306-154	Sequence 154, App

ALIGNMENTS

RESULT 1
US-09-285-306-2
; Sequence 2, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gengras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 2
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium abscessus
US-09-285-306-2

Query Match	100.0%	Score 626;	DB 9;	Length 626;
Best Local Similarity	100.0%	Pred. No. 4.3e-150;		
Matches 626;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qy	1	TCGTCCTCCGTCGTGGCGGCGATCAAGGAGTTCTTCGGAACCCAGCCAGCTGTCGCGAGTTCA	60	
Db	1	TCGTCCTCCGTCGTGGCGGCGATCAAGGAGTTCTTCGGAACCCAGCCAGCTGTCGCGAGTTCA	60	
Qy	61	TGACACGAGAACACCCCGCTGTGGGCGCTGACCCCAAGCGTCTGTCTGTCGCGCTGGGCC	120	
Db	61	TGACACGAGAACACCCCGCTGTGGGCGCTGACCCCAAGCGTCTGTCTGTCGCGCTGGGCC	120	
Qy	121	CCGTCGTCTGACCCGTCGCGCGCGCTGAGGTCGCGGAGTCCGCGAGTGCACCCCTCGCACT	180	
Db	121	CCGTCGTCTGACCCGTCGCGCGCGCTGAGGTCGCGGAGTCCGCGAGTGCACCCCTCGCACT	180	

QY	181	ACGGCGCATGTGCCGATCGAGACCCCGAAGGCCCGAACATCGCGCTGATCGGCTCGC	240	Db	181	ACGGCGCATGTGCCGATCGAGACCCCGAAGGCCCGAACATCGCGCTGATCGGCTCGC	240
Db	181	ACGGCGCATGTGCCGATCGAGACCCCGAAGGCCCGAACATCGCGCTGATCGGCTCGC	240	QY	241	TGTCGGTGTACGCGGGGTCAACCCCGTTCGGTTTCATCGAGAGCCCTTACCGGAAGGTCT	300
QY	241	TGTCGGTGTACGCGGGGTCAACCCCGTTCGGTTTCATCGAGAGCCCTTACCGGAAGGTCT	300	Db	241	TGTCGGTGTACGCGGGGTCAACCCCGTTCGGTTTCATCGAGAGCCCTTACCGGAAGGTCT	300
Db	241	TGTCGGTGTACGCGGGGTCAACCCCGTTCGGTTTCATCGAGAGCCCTTACCGGAAGGTCT	300	QY	301	CGGACGGAGTGTACCGGAGCATCCACTACCTGACGGCCGACGAAGAGGACCGCCACG	360
QY	301	CGGACGGAGTGTACCGGAGCATCCACTACCTGACGGCCGACGAAGAGGACCGCCACG	360	Db	301	CGGACGGAGTGTACCGGAGCATCCACTACCTGACGGCCGACGAAGAGGACCGCCACG	360
Db	301	CGGACGGAGTGTACCGGAGCATCCACTACCTGACGGCCGACGAAGAGGACCGCCACG	360	QY	361	TGTCGGCGCAGGCGCAACTCGCCCGTGGACCGCCAAACCGCCGCTTCAACCGAGGAGAATCC	420
QY	361	TGTCGGCGCAGGCGCAACTCGCCCGTGGACCGCCAAACCGCCGCTTCAACCGAGGAGAATCC	420	Db	361	TGTCGGCGCAGGCGCAACTCGCCCGTGGACCGCCAAACCGCCGCTTCAACCGAGGAGAATCC	420
Db	361	TGTCGGCGCAGGCGCAACTCGCCCGTGGACCGCCAAACCGCCGCTTCAACCGAGGAGAATCC	420	QY	421	TGTCGGCGCAGGCGCGAGGTGGAGTTCGTGTCGGCGACCGAGGTGCACTACATGG	480
QY	421	TGTCGGCGCAGGCGCGAGGTGGAGTTCGTGTCGGCGACCGAGGTGCACTACATGG	480	Db	421	TGTCGGCGCAGGCGCGAGGTGGAGTTCGTGTCGGCGACCGAGGTGCACTACATGG	480
Db	421	TGTCGGCGCAGGCGCGAGGTGGAGTTCGTGTCGGCGACCGAGGTGCACTACATGG	480	QY	481	ATGTCGCGCGCCGACATGCTGTCGGTCGCGACCGCATGATCCCGTTCCTCGAGCACG	540
QY	481	ATGTCGCGCGCCGACATGCTGTCGGTCGCGACCGCATGATCCCGTTCCTCGAGCACG	540	Db	481	ATGTCGCGCGCCGACATGCTGTCGGTCGCGACCGCATGATCCCGTTCCTCGAGCACG	540
Db	481	ATGTCGCGCGCCGACATGCTGTCGGTCGCGACCGCATGATCCCGTTCCTCGAGCACG	540	QY	541	ACGACGCCAACCCGTGCCCTCATGGGTGCCAACATGACGCCGCGGTTCGCGTGTGTC	600
QY	541	ACGACGCCAACCCGTGCCCTCATGGGTGCCAACATGACGCCGCGGTTCGCGTGTGTC	600	Db	541	ACGACGCCAACCCGTGCCCTCATGGGTGCCAACATGACGCCGCGGTTCGCGTGTGTC	600
Db	541	ACGACGCCAACCCGTGCCCTCATGGGTGCCAACATGACGCCGCGGTTCGCGTGTGTC	600	QY	601	GTAGCGAGGCTCCGCTGGTTCGGTACC	626
QY	601	GTAGCGAGGCTCCGCTGGTTCGGTACC	626	Db	601	GTAGCGAGGCTCCGCTGGTTCGGTACC	626
Db	601	GTAGCGAGGCTCCGCTGGTTCGGTACC	626	RESULT 3			
US-09-285-306-45				US-09-285-306-45			
; Sequence 45, Application US/09285306A				; Sequence 45, Application US/09285306A			
; Publication No. US20020187467A1				; Publication No. US20020187467A1			
; GENERAL INFORMATION:				; GENERAL INFORMATION:			
; APPLICANT: Gengeras, Thomas				; APPLICANT: Gengeras, Thomas			
; APPLICANT: Drenkow, Jorg				; APPLICANT: Drenkow, Jorg			
; TITLE OF INVENTION: Mycobacterial rpoB Sequences				; TITLE OF INVENTION: Mycobacterial rpoB Sequences			
; FILE REFERENCE: 018547-018570US				; FILE REFERENCE: 018547-018570US			
; CURRENT APPLICATION NUMBER: US/09/285,306A				; CURRENT APPLICATION NUMBER: US/09/285,306A			
; CURRENT FILING DATE: 1999-04-02				; CURRENT FILING DATE: 1999-04-02			
; EARLIER APPLICATION NUMBER: US 60/080,616				; EARLIER APPLICATION NUMBER: US 60/080,616			
; EARLIER FILING DATE: 1998-04-03				; EARLIER FILING DATE: 1998-04-03			
; NUMBER OF SEQ ID NOS: 181				; NUMBER OF SEQ ID NOS: 181			
; SOFTWARE: FastSeq for Windows Version 3.0				; SOFTWARE: FastSeq for Windows Version 3.0			
; SEQ ID NO 45				; SEQ ID NO 45			
; LENGTH: 626				; LENGTH: 626			
; TYPE: DNA				; TYPE: DNA			
; ORGANISM: Mycobacterium chelonae				; ORGANISM: Mycobacterium chelonae			
US-09-285-306-47				US-09-285-306-47			
Query Match				Query Match			
Best Local Similarity 100.0%; Score 626; DB 9; Length 626;				Best Local Similarity 99.2%; Score 621.2; DB 9; Length 626;			
Matches 626; Conservative 0; Mismatches 0; Indels 0; Gaps 0;				Matches 523; Conservative 0; Mismatches 3; Indels 0; Gaps 0;			
QY	1	TCCGTCCCGTTCGTGGCGGATCAAGGAGTTCCTCGGAACGACGAGCTGTGCGAGTTCA	60	QY	1	TCCGTCCCGTTCGTGGCGGATCAAGGAGTTCCTCGGAACGACGAGCTGTGCGAGTTCA	60
Db	1	TCCGTCCCGTTCGTGGCGGATCAAGGAGTTCCTCGGAACGACGAGCTGTGCGAGTTCA	60	Db	1	TCCGTCCCGTTCGTGGCGGATCAAGGAGTTCCTCGGAACGACGAGCTGTGCGAGTTCA	60
QY	61	TGGACCAAGAACAAACCGCTGTGCGGCTGACCCACCAAGCGTGTGTCGGCGCTGGGCC	120	QY	61	TGGACCAAGAACAAACCGCTGTGCGGCTGACCCACCAAGCGTGTGTCGGCGCTGGGCC	120
Db	61	TGGACCAAGAACAAACCGCTGTGCGGCTGACCCACCAAGCGTGTGTCGGCGCTGGGCC	120	Db	61	TGGACCAAGAACAAACCGCTGTGCGGCTGACCCACCAAGCGTGTGTCGGCGCTGGGCC	120
QY	121	CCGGTGGTGTGACCCGTGACCGCGCGCTCGAGGTTCGGACGTCGACCCCTCGCACT	180	QY	121	CCGGTGGTGTGACCCGTGACCGCGCGCTCGAGGTTCGGACGTCGACCCCTCGCACT	180
Db	121	CCGGTGGTGTGACCCGTGACCGCGCGCTCGAGGTTCGGACGTCGACCCCTCGCACT	180	Db	121	CCGGTGGTGTGACCCGTGACCGCGCGCTCGAGGTTCGGACGTCGACCCCTCGCACT	180
QY	181	ACGGCGCATGTGCCCGATCGAGACCCCGAAGGCCCGAACATCGCGCTGATCGGCTCGC	240	QY	181	ACGGCGCATGTGCCCGATCGAGACCCCGAAGGCCCGAACATCGCGCTGATCGGCTCGC	240
Db	181	ACGGCGCATGTGCCCGATCGAGACCCCGAAGGCCCGAACATCGCGCTGATCGGCTCGC	240	Db	181	ACGGCGCATGTGCCCGATCGAGACCCCGAAGGCCCGAACATCGCGCTGATCGGCTCGC	240

```
QY 241 TGTGGGTGTACGGCGGGTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAGGTCT 300
Db |||||
QY 241 TGTGGGTGTACGGCGGGTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAGGTCT 300
Db |||||
QY 301 CGACGAGGTTGTACCGAGACATCCACTACCTGACGGCCGAGAGAGACCGCCACG 360
Db |||||
QY 301 CGACGAGGTTGTACCGAGAGATCCACTACCTGACGGCCGAGAGAGACCGCCACG 360
Db |||||
QY 361 TGTGGCGCAGGCAACTCGCCGTTGAGCCCAACGGCCGCTTACCGAGAGAAATCC 420
Db |||||
QY 361 TGTGGCGCAGGCAACTCGCCGTTGAGCCCAACGGCCGCTTACCGAGAGAAATCC 420
Db |||||
QY 421 TGTTCGCGCAGGCGGAGGTTCGAGTTTCGTCGGCAGCGAGGTTCGATACATG 480
Db |||||
QY 421 TGTTCGCGCAGGCGGAGGTTCGAGTTTCGTCGGCAGCGAGGTTCGATACATG 480
Db |||||
QY 481 ATGTCTCGCGCCAGATGGTTCGTCGCGACCGCCATGATCCCGTTCTCGAGCAG 540
Db |||||
QY 481 ATGTCTCGCGCCAGATGGTTCGTCGCGACCGCCATGATCCCGTTCTCGAGCAG 540
Db |||||
QY 541 ACAGCCCAACCGTCCCTCATGGTGCCCAACATGACGGCCGAGGTTCGCTGGTGC 600
Db |||||
QY 541 ACAGCCCAACCGTCCCTCATGGTGCCCAACATGACGGCCGAGGTTCGCTGGTGC 600
Db |||||
QY 601 GTAGCGAGGTCGCTGGTTCGTTACC 626
Db |||||
QY 601 GTAGCGAGGTCGCTGGTTCGTTACC 626
Db |||||
```

RESULT 4

US-09-285-306-46

; Sequence 46, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Gingeras, Thomas

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 46

; LENGTH: 626

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-46

```
Query Match 99.2%; Score 621.2; DB 9; Length 626;
Best Local Similarity 99.5%; Pred. No. 7.3e-149;
Matches 623; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
```

```
QY 1 TCCGTCCTCGTGGCGCGATCAAGGAGTCTTCGGAACCCAGCAGCTGTGCGAGTTCA 60
Db |||||
QY 1 TCCGTCCTCGTGGCGCGATCAAGGAGTCTTCGGAACCCAGCAGCTGTGCGAGTTCA 60
Db |||||
QY 61 TGGACCAAGAAACACCCGCTGTCGGGCTTGACCCCAAGCGTCTGTGCGGCGTGGGCC 120
Db |||||
QY 61 TGGACCAAGAAACACCCGCTGTCGGGCTTGACCCCAAGCGTCTGTGCGGCGTGGGCC 120
Db |||||
QY 121 CGGTGGTCTGACCGGTGACCGCGCGCTCGAGGTTCGGAAGTGCACCCCTCGCACT 180
Db |||||
QY 121 CGGTGGTCTGACCGGTGACCGCGCGCTCGAGGTTCGGAAGTGCACCCCTCGCACT 180
Db |||||
QY 181 ACGCCCGCATGTGCCCGATCGAGACCCCGAGGCCGAAATCGGCCCTGATCGGCTGC 240
Db |||||
QY 181 ACGCCCGCATGTGCCCGATCGAGACCCCGAGGCCGAAATCGGCCCTGATCGGCTGC 240
Db |||||
QY 241 TGTGGGTGTACGGCGGGTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAGGTCT 300
Db |||||
```

```
Db 241 TGTGGGTGTACGGCGCGTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAGGTCT 300
QY 301 CGACGAGGTTGTACCGAGACATCCACTACCTGACGGCCGAGAGAGACCGCCACG 360
Db |||||
QY 301 CGACGAGGTTGTACCGAGAGATCCACTACCTGACGGCCGAGAGAGACCGCCACG 360
Db |||||
QY 361 TGTGGCGCAGGCAACTCGCCGTTGAGCCCAACGGCCGCTTACCGAGAGAAATCC 420
Db |||||
QY 361 TGTGGCGCAGGCAACTCGCCGTTGAGCCCAACGGCCGCTTACCGAGAGAAATCC 420
Db |||||
QY 421 TGTTCGCGCAGGCGGAGGTTCGAGTTTCGTCGGCAGCGAGGTTCGATACATG 480
Db |||||
QY 421 TGTTCGCGCAGGCGGAGGTTCGAGTTTCGTCGGCAGCGAGGTTCGATACATG 480
Db |||||
QY 481 ATGTCTCGCGCCAGATGGTTCGTCGCGACCGCCATGATCCCGTTCTCGAGCAG 540
Db |||||
QY 481 ATGTCTCGCGCCAGATGGTTCGTCGCGACCGCCATGATCCCGTTCTCGAGCAG 540
Db |||||
QY 541 ACAGCCCAACCGTCCCTCATGGTGCCCAACATGACGGCCGAGGTTCGCTGGTGC 600
Db |||||
QY 541 ACAGCCCAACCGTCCCTCATGGTGCCCAACATGACGGCCGAGGTTCGCTGGTGC 600
Db |||||
QY 601 GTAGCGAGGTCGCTGGTTCGTTACC 626
Db |||||
QY 601 GTAGCGAGGTCGCTGGTTCGTTACC 626
Db |||||
```

RESULT 5

US-09-285-306-39

; Sequence 39, Application US/09285306A

; Publication No. US20020187467A1

; GENERAL INFORMATION:

; APPLICANT: Drenkow, Jorg

; APPLICANT: Affymetrix, Inc.

; TITLE OF INVENTION: Mycobacterial rpoB Sequences

; FILE REFERENCE: 018547-018570US

; CURRENT APPLICATION NUMBER: US/09/285,306A

; CURRENT FILING DATE: 1999-04-02

; EARLIER FILING DATE: 1998-04-03

; NUMBER OF SEQ ID NOS: 181

; SOFTWARE: FastSeq for Windows Version 3.0

; SEQ ID NO 39

; LENGTH: 626

; TYPE: DNA

; ORGANISM: Mycobacterium chelonae

US-09-285-306-39

```
Query Match 93.1%; Score 582.8; DB 9; Length 626;
Best Local Similarity 95.7%; Pred. No. 4.4e-139;
Matches 599; Conservative 0; Mismatches 27; Indels 0; Gaps 0;
```

```
QY 1 TCCGTCCTCGTGGCGCGATCAAGGAGTCTTCGGAACCCAGCAGCTGTGCGAGTTCA 60
Db 1 TCCGTCCTCGTGGCGCGATCAAGGAGTCTTCGGAACCCAGCAGCTGTGCGAGTTCA 60
QY 61 TGGACCAAGAAACACCCGCTGTCGGGCTTGACCCCAAGCGTCTGTGCGGCGTGGGCC 120
Db 61 TGGACCAAGAAACACCCGCTGTCGGGCTTGACCCCAAGCGTCTGTGCGGCGTGGGCC 120
QY 121 CGGTGGTCTGACCGGTGACCGCGCGCTTCGAGGTTCGCGAGTGCACCCCTCGCACT 180
Db 121 CGGTGGTCTGACCGGTGACCGCGCGCTTCGAGGTTCGCGAGTGCACCCCTCGCACT 180
QY 181 ACGCCCGCATGTGCCCGATCGAGACCCCGAGGCCGAAATCGGCCCTGATCGGCTGC 240
Db 181 ACGCCCGCATGTGCCCGATCGAGACCCCGAGGCCGAAATCGGCCCTGATCGGCTGC 240
QY 241 TGTGGGTGTACGGCGGGTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAGGTCT 300
Db 241 TGTGGGTGTACGGCGGGTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAGGTCT 300
```

QY	301	CGGACGGAGTTGTACCGACGACATCCACTACCTGACGGCCGACGAAGAGGACCGCCACG	360	Db	319	CCGAGGGTGTGCTCACCAGCAGAGATCCACTACCTGACGGCCGACGAAGAGGACCGCCACG	378
Db	301	CCGAGGGTGTGCTCACCAGCAGACATCCACTACCTGACGGCCGACGAAGAGGACCGCCACG	360	QY	361	TGGTGGCGGAGGCAAACTGCCCGTGGAGCGCCAAACGGCGCTTTCACCGAGGAAGATCC	420
QY	361	TGGTGGCGGAGGCAAACTGCCCGTGGAGCGCCAAACGGCGCTTTCACCGAGGAAGATCC	420	Db	379	TGGTGGCGGAGGCAAACTGCCCTGTGGATGCGCGACGGCCGCTTTCACCGAGGACAAATCC	438
Db	361	TGGTGGCGGAGGCAAACTGCCCGTGGAGCGCCAAACGGCGCTTTCACCGAGGAAGATCC	420	QY	421	TGGTTTCGCGCAAGGGCGGCGAGGTGGAGTTTCGTGTCCGCGACCGAGGTGCACTACATGG	480
QY	421	TGGTTTCGCGCAAGGGCGGCGAGGTGGAGTTTCGTGTCCGCGACCGAGGTGCACTACATGG	480	Db	439	TGGTCCGCGCTAAGGTTGGGAGGTGGCGAGGTTCGTTCGCGCGACCGAGGTGCACTACATGG	498
Db	421	TGGTCCGCGCTAAGGTTGGGAGGTGGCGAGGTTCGTTCGCGCGACCGAGGTGCACTACATGG	480	QY	481	ATGTCTCGCCGCGCCAGATGGTTCGGTTCGCGACCGCCCATGATCCCGTTCCTCGAGCAG	540
QY	481	ATGTCTCGCCGCGCCAGATGGTTCGGTTCGCGACCGCCCATGATCCCGTTCCTCGAGCAG	540	Db	499	ACGTCTCGCCGCGCCAGATGGTTCGGTTCGCGACCGCCCATGATCCCGTTCCTCGAGCAG	558
Db	481	ACGTCTCGCCGCGCCAGATGGTTCGGTTCGCGACCGCCCATGATCCCGTTCCTCGAGCAG	540	QY	541	ACGACGCCAAACCGTGCCTCATGGTTCGCGACCATGACGCGCCAGGCGGTTCCGCTGTGC	600
QY	541	ACGACGCCAAACCGTGCCTCATGGTTCGCGACCATGACGCGCCAGGCGGTTCCGCTGTGC	600	Db	559	ACGACGCCAAACCGTGCCTCATGGTTCGCGACCATGACGCGCCAGGCGGTTCCGCTGTGC	618
Db	541	ACGACGCCAAACCGTGCCTCATGGTTCGCGACCATGACGCGCCAGGCGGTTCCGCTGTGC	600	QY	601	GTAGCGAGGCTCCGCTCGGTTCGGTACC	626
QY	601	GTAGCGAGGCTCCGCTCGGTTCGGTACC	626	Db	619	GCAGCGAGGCCCGCTCGGTTCGGTACC	644
Db	601	GCAGCGAGGCCCGCTCGGTTCGGTACC	626	RESULT 7			
US-09-285-306-30							
; Sequence 40, Application US/09285306A							
; Publication No. US20020187467A1							
; GENERAL INFORMATION:							
; APPLICANT: Gingeras, Thomas							
; APPLICANT: Drenkow, Jorg							
; APPLICANT: Affymetrix, Inc.							
; TITLE OF INVENTION: Mycobacterial rpoB Sequences							
; FILE REFERENCE: 018547-018570US							
; CURRENT APPLICATION NUMBER: US/09/285.306A							
; CURRENT FILING DATE: 1999-04-02							
; EARLIER APPLICATION NUMBER: US 60/080.616							
; EARLIER FILING DATE: 1998-04-03							
; NUMBER OF SEQ ID NOS: 181							
; SOFTWARE: FastSeq for Windows Version 3.0							
; SEQ ID NO 30							
; LENGTH: 652							
; TYPE: DNA							
; ORGANISM: Mycobacterium chelonae							
US-09-285-306-30							
Query Match 92.8%; Score 581.2; DB 9; Length 652;							
Best Local Similarity 95.5%; Pred. No. 1.1e-138;							
Matches 598; Conservative 0; Mismatches 28; Indels 0; Gaps 0;							
QY	1	TCCGTCCTCGTGTGGCGCGATCAAGGAGTTCCTCGGAACCGACGCGTGTGCGAGTTCA	60	Db	19	TCCGTCCTCGTGTGGCGCGATCAAGGAGTTCCTCGGAACCGACGCGTGTGCGAGTTCA	78
Db	19	TCCGTCCTCGTGTGGCGCGATCAAGGAGTTCCTCGGAACCGACGCGTGTGCGAGTTCA	78	QY	61	TGGACCAAGAACAAACCGGTGTGGCGCTGACCCCAAGCGTGTGTGCGCGCTGGGCC	120
QY	61	TGGACCAAGAACAAACCGGTGTGGCGCTGACCCCAAGCGTGTGTGCGCGCTGGGCC	120	Db	79	TGGACCAAGAACAAACCGGTGTGGCGCTGACCCCAAGCGTGTGTGCGCGCTGGGCC	138
Db	79	TGGACCAAGAACAAACCGGTGTGGCGCTGACCCCAAGCGTGTGTGCGCGCTGGGCC	138	QY	121	CCGGTGTGTGACCGGTGACCGCGCGCTGAGGTTCGGGACGTGACCCCTCGCACT	180
QY	121	CCGGTGTGTGACCGGTGACCGCGCGCTGAGGTTCGGGACGTGACCCCTCGCACT	180	Db	139	CCGGTGTGTGACTCGTGAACCGCGCGCTTGGGTTCGCGACGTGACCCCTCGCACT	198
Db	139	CCGGTGTGTGACTCGTGAACCGCGCGCTTGGGTTCGCGACGTGACCCCTCGCACT	198	QY	181	ACGGCCGCGATGTGCCGATCGAGACCCCGGAAGGCCGGAACATCGGCCTGATCGGCTCGC	240
QY	181	ACGGCCGCGATGTGCCGATCGAGACCCCGGAAGGCCGGAACATCGGCCTGATCGGCTCGC	240	Db	199	ACGGCCGCGATGTGCCGATCGAGACCCCGGAAGGCCGGAACATCGGTCGTTGCG	258
Db	199	ACGGCCGCGATGTGCCGATCGAGACCCCGGAAGGCCGGAACATCGGTCGTTGCG	258	QY	241	TGTCGGTGTACCGGGGTCAACCGGTTCGGTTTCATCGAGACGCTTACCGGAGGTCT	300
QY	241	TGTCGGTGTACCGGGGTCAACCGGTTCGGTTTCATCGAGACGCTTACCGGAGGTCT	300	Db	259	TGTCGGTGTACCGGGGTCAACCGGTTCGGTTTCATCGAGACGCTTACCGGAGGTCT	318
Db	259	TGTCGGTGTACCGGGGTCAACCGGTTCGGTTTCATCGAGACGCTTACCGGAGGTCT	318	QY	301	CGGACGGAGTTGTACCGGACGACATCCACTACCTGACGGCCGACGAAGAGGACCGCCACG	360

QY	361	TGTTGGCGCAGGCCAACTCGCCGTGGACGCCAAACGGCCGCTTACCGAGGAGAAATCC	420
Db	361	TGTTGGCGCAGGCCAACTCGCTGTGGATGCGACGGCCGCTTACCGAGGACAAGATCC	420
QY	421	TGTTTCGGCGCAAGGGCGGCGAGGTTCGTGTCGGCGACCGAGTTCGACTACATGG	480
Db	421	TGTTCCGCGCTAAGGTCGCGAGTTCGAGTTTCGTCTCGCGACCGAGTTCGACTACATGG	480
QY	481	ATGTTCTCGCGCGGCGAGATGTTGCGTTCGGACCGCCATGATCCGTTCTCTCGAGCAGC	540
Db	481	ACGTTCTCGCGCGGCGAGATGTTGCGTTCGGTCGCGACCGCCATGATCCGTTCTCTCGAGCAGC	540
QY	541	ACGACGCCAACCGTGCCTCATGGTGGCCACATGACGCGCCAGCGGTTCCGCTGGTGTC	600
Db	541	ACGACGCCAACCGTGCCTCATGGTGGCCACATGACGCGCCAGCGGTTCCGCTGGTGTC	600
QY	601	GTACGAGGCTCCGTCGTGCGTACC	626
Db	601	GCACGAGGCCCGCGTGTTCGCTACC	626

RESULT 8

```

US-09-285-306-33
; Sequence 33, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpo
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version
; SEQ ID NO 33
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-33

```

Query Match	92.3%	Score 578;	DB 9;	Length 626;
Best Local Similarity	95.2%;	Pred. No. 7.3e-138;		
Matches 596;	Conservative 0;	Mismatches 30;	Indels 0;	Gaps 0;
QY	1	TCCGTC	CCGTCGTCGGCGCGCATCAAGAGATTCTTCGGAACACGACGACTGTTCGCAAGTTCA	60
Db	1	TCCGTC	CCGTCGTCGGCGCGCATCAAGAGATTCTTCGGAACACGACGACTGTTCGCAAGTTCA	60
QY	61	TGGAACAGAGAACAAACCCGCTGTTCGGGCTGTACCCACAAGCGTCGCTTC	TGTCGGCGCTGGGCC	120
Db	61	TGGAACAGAGAACAAACCCGCTGTTCGGGCTGTACCCACAAGCGTCGCTTC	TGTCGGCGCTGGGCC	120
QY	121	CCGGTGTGTCGACCCGTGTACCGCGCGGCTTCAGAGTTCGGGAGGTGCACCCCTTCGGCACT	180	
Db	121	CCGGTGTGTCGACCCGTGTACCGCGCGGCTTCAGAGTTCGGGAGGTGCACCCCTTCGGCACT	180	
QY	181	ACGGCCGCGATGTGCCCGATCTGACACCCCGGAGGCGCGAACATCGGCCTGATCGGCTCGC	240	
Db	181	ACGGCCGCGATGTGCCCGATCTGACACCCCGGAGGCGCGAACATCGGCCTGATCGGCTCGC	240	
QY	241	TGTCGGTGTACGCGCGGGTCAACCCGTTTCGGTTTCATTCGAGACGCGCTTACCGGAAGGTCT	300	
Db	241	TGTCGGTGTACGCGCGGGTCAACCCGTTTCGGTTTCATTCGAGACGCGCTTACCGGAAGGTCT	300	
QY	301	CGGACGGAGTTGTACCGGACGACATCCACTACCTGACGGCCGACGAAGAGGACCGCCACG	360	
Db	301	CGGAGGGTGTGTCACCGGACGAGATCCACTACCTGACGGCCGACGAAGAGGACCGCCACG	360	
QY	361	TGGTGGCGGACGCCAACTCGCCCGTGGACGCCAACGGCCGCTTACCGAGGAGAATCC	420	

	Db	361	TCGTGGCAGGCCAACTCGCCTGTGGATGCCGACGGCCGCTTACCGAGGACAAAGATCC	420
Qy	421	TGGTTCCGCGGAAGGCGCGGAGGTGGAGTTCGTCTCGCGCAGCCGAGGTCGACTACATGG	480	
Db	421	TGGTCCGCGCGTAAGGGTGGCGAGGTCGAGTTTCGTCTCGCGCAGCCGAGGTGGACTACATGG	480	
Qy	481	ATGTCCTCGCCGCGGCAGATGCTGTGCGTTCGGACCGCCATGATCCCGTTCCTTCGAGCAGC	540	
Db	481	ACGTCTCGCCGCGCCAAATGTTGTGCGTTCGCGACCGCCATGATCCCGTTCCTTCGAGCAGC	540	
Qy	541	ACGAGCGCAACGGTGCCTCATGGTGCCACATGCAGCGCCAGCGGTTCCGCTGGGTGC	600	
Db	541	ACGAGCGCAACGGTGCCTCATGGTGCCACATGCAGCGCCAGCGGTTCCGCTGGGTGC	600	
Qy	601	GTACGAGGCTCCGCTGGTCCGTACC	626	
Db	601	GCACGAGGCCCGCTGGTCCGTACC	626	

RESULT 9

```

US-09-285-306-38
; Sequence 38, Application US/09285306A
; Publication No. US20020187457A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 38
; LENGTH: 652
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-38

```

Query Match	92.3%	Score 578;	DB 9;	Length 652;
Best Local Similarity	95.2%;	Pred. No. 7.3e-138;		
Matches 596;	Conservative 0;	Mismatches 30;	Indels 0;	Gaps 0;
QY	1	TCGGTCCGGTCGTGGCGGCGCATCAAGAGATTCTTCGGAACACAGCCAGCTGTCGCAGITCA	60	
Db	18	TCGGTCCGGTCGTGGCGGCGCATCAAGAGATTCTTCGGAACACAGCCAGCTGTCGCAGITCA	77	
QY	61	TGACACAGAAACACCCGCTGTTCGGGCTGACCCACAAAGCGTCTGTCGCGCGCTGGGCC	120	
Db	78	TGACACAGAAACACCCGCTGTTCGGGCTGACCCACAAAGCGTCTGTCGCGCGCTGGGCC	137	
QY	121	CCGGTGGTCTGACCCCTGACCGCGCGGCGCTCGAGTCCGCGACGTGCACCCCTCGCACT	180	
Db	138	CCGGTGGTCTGACCCCTGACCGCGCGGCGCTTCGAGGTCGCGACGTGCACCCCTCGCACT	197	
QY	181	ACGGCCGCAATGTGCCCGATCGAGACCCCGGAAGGCCCGCAACATCGGCGCTGATCGGCTCGC	240	
Db	198	ACGGCCGCAATGTGCCCGATCGAGACCCCGGAAGGCCCGCAACATCGGCGCTGATCGGTTCCG	257	
QY	241	TGTCGGTGTACCGCGGGGTCAACCCGTTCCGTTTCATTCAGAGCGCTTACCGGAAGTCT	300	
Db	258	TGTCGGTGTACCGCGGGGTCAACCCGTTCCGTTTCATTCAGAGCGCTTACCGGAAGTGT	317	
QY	301	CGGA CGGAGTTCTACCCGACGATCCACTACTCGACGGCCGACGAAGAGACCGCCACG	360	
Db	318	CGGAGGGTGTCTCACCCGACGAGATCCACTACTGACCGCGACGAGAGACCGCCACG	377	
QY	361	TGGTGGCGCAGGCCAACTCGCCCGTGGAGCCAAACCGCCGCTTTCACCGAGGAGAAGATCC	420	
Db	378	TGTTGGCACAGGCCAACTCGCCTGTGGATTCGCCGACGGCCGCTTTCACCGAGGACAAATCC	437	

QY	421	TGTTTCGCGCAAGGGCGGAGGTGGAGTTCGTTCGGCGACCGAGGTGCATACATGG	480
Db	438	TGTTTCGCGCAAGGGTGGGAGGTGGAGTTCGTTCGGCGACCGAGGTGCATACATGG	497
QY	481	ATGTCGCGCGCGCAGATGGTTCGGTCGCGACCGCCATGATCCCGTTCCTCGAGCACG	540
Db	498	ACGTCTCGCGCGCCAAATGGTTCGGTCGCGACCGCCATGATCCCGTTCCTCGAGCACG	557
QY	541	ACGACGCCAACCGTGCCTCATGGTGCACCAATGCAGCGCCAGCGCGTTCCGCTGGTGC	600
Db	558	ACGACGCCAACCGTGCCTCATGGTGCACCAATGCAGCGCCAGCGCGTTCCGCTGGTGC	617
QY	601	GTACCGAGGCTCCGCTGGTTCGGTACC	626
Db	618	GCAGCGAGGCCCGCTGGTTCGGTACC	643
RESULT 10			
US-09-285-306-31			
; Sequence 31, Application US/09285306A			
; Publication No. US20020187467A1			
; GENERAL INFORMATION:			
; APPLICANT: Gingers, Thomas			
; APPLICANT: Drenkow, Jorg			
; APPLICANT: Affymetrix, Inc.			
; TITLE OF INVENTION: Mycobacterial rpoB Sequences			
; FILE REFERENCE: 018547-018570US			
; CURRENT APPLICATION NUMBER: US/09/285,306A			
; CURRENT FILING DATE: 1999-04-02			
; EARLIER APPLICATION NUMBER: US 60/080,616			
; EARLIER FILING DATE: 1998-04-03			
; NUMBER OF SEQ ID NOS: 181			
; SOFTWARE: FastSeq for Windows Version 3.0			
; SEQ ID NO 31			
; LENGTH: 626			
; TYPE: DNA			
; ORGANISM: Mycobacterium chelonae			
US-09-285-306-31			
Query Match 91.8%; Score 574.8; DB 9; Length 626;			
Best Local Similarity 94.9%; Pred. No. 4.8e-137;			
Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;			
QY	1	TCCGTCCCGTCGTGGCGCGATCAAGGAGTTCTTCGGAACCGCAGCTGTCGCAATTCA	60
Db	1	TCCGTCCCGTCGTGGCGCGATCAAGGAGTTCTTCGGAACCGCAGCTGTCGCAATTCA	60
QY	61	TGGACCAAGAACCCGCTGTCGGGCTGACCCCAAGCGTCTGTTCGGCGCTGGGCC	120
Db	61	TGGACCAAGAACCCGCTTTCGGGTCGACCCCAAGCGTCTGTTCGGGCTTCGGGCC	120
QY	121	CGGTGGTCTGACCGCTGACCGCGGCTCGAGGTCCGCGACGTGCACCCCTCGCACT	180
Db	121	CGGTGGTCTGACCGCTGACCGCGCTGGCTTGTAGTTCGGGACGTGCACCCCTCGCACT	180
QY	181	ACGGCGCATGTGCCCGATCGAGACCCCGGAAGGCCGGAACATCGGCTGTATCGGCTCGC	240
Db	181	ACGGCGCATGTGCCCGATCGAGACCCCGGAAGGCCGGAACATCGGCTGTATCGGTTCCG	240
QY	241	TGTCGGTGTACCGCGGGTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAAGTCT	300
Db	241	TTTCGGTGTACCGCGGGTCAACCCGTTTCGTTTCATCGAGACGCGTACCGGAAGTGT	300
QY	301	CGGACGGAGTTGTACCGAGCATCCACTACTGACGGCGCGACGGAAGAGGACCGCCACG	360
Db	301	CGGAGGTTGTCTACCGAGCATCCACTACTGACCGCGCGACGGAAGAGGACCGCCACG	360
QY	361	TGTTGGCGCAGGCCAACTCGCCCGTGGACGCCAACCGCGCGCTTACCGAGGAGAAATCC	420
Db	361	TCGTGGCACAGGCCAACTCGCCTGTGGATGCCGACGCGCGCTTACCGAGGACAAATCC	420
QY	421	TGTTTCGCGCAAGGGCGGAGGTGGAGTTCGTTCGGCGACCGAGGTGCATACATGG	480

QY 481 ATGTCTCGCGCCAGATGGTTCGGTCCGACCCGATGATCCGTTCTCTCGAGCAG 540
Db 481 ACGTCTCGCGCCAGATGGTTCGGTCCGACCCGATGATCCGTTCTCTCGAGCAG 540
QY 541 ACGACCCCAACCGTCCCTCATGGTGCCAAATGACAGCCGAGCGGTTCCGCTGGTGC 600
Db 541 ACGACCCCAACCGTCCCTCATGGTGCCAAATGACAGCCGAGCGGTTCCGCTGGTGC 600
QY 601 GTAGCAGGCTCGCTGGTTCGGTACC 626
Db 601 GCAGCGAGGCGCGCTGGTTCGGTACC 626

RESULT 12

US-09-285-306-37
; Sequence 37, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 37
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-37

Query Match 91.8%; Score 574.8; DB 9; Length 626;
Best Local Similarity 94.9%; Pred. No. 4.8e-137;
Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;
QY 1 TCCGTCCCGTCTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCCAGCTGTGCGAGTTCA 60
Db 1 TCCGTCCCGTCTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCCAGCTGTGCGAGTTCA 60
QY 61 TGGACCAAGAAACCCCGTCTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCCAGCTGTGCGAGTTCA 120
Db 61 TGGACCAAGAAACCCCGTCTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCCAGCTGTGCGAGTTCA 120
QY 121 CCGGTGGTCTGACCCGCTGACCCGCGCGCTCGAGTTCGCGACGTGACCCCTCGCACT 180
Db 121 CCGGTGGTCTGACCCGCTGACCCGCGCGCTCGAGTTCGCGACGTGACCCCTCGCACT 180
QY 181 ACGCGCGATGTGCCGATCGAGACCCCGGAAGCCGGAACATCGGCTGATCGGCTCGC 240
Db 181 ACGCGCGATGTGCCGATCGAGACCCCGGAAGCCGGAACATCGGCTGATCGGCTCGC 240
QY 241 TGTGGTGTACCGCGGCTCAACCGTTCCGTTTCATCGAGCGCTTACCGAAGGTCT 300
Db 241 TTTGGTGTACCGCGGCTCAACCGTTCCGTTTCATCGAGCGCTTACCGAAGGTCT 300
QY 301 CGGACGAGGTGTTCACCGACGACATCCACTACCTGACCGCGCGACGAGAGGACCGCCACG 360
Db 301 CCGAGGTGTGCTCACCGACGAGATCCACTACCTGACCGCGCGACGAGAGGACCGCCACG 360
QY 361 TGGTGGCGAGGCGCAACTCGCCCGTGGACGCAACCGCGCTTCAACGAGGAGAGATCC 420
Db 361 TCGTGGCACAGGCGCAACTCGCCCGTGGATCGGACGCGCGCTTCAACGAGGAGATCC 420
QY 421 TGGTTCGCGCAAGGCGCGAGGTGGAGTTCTGTTCTGGCGACCGAGTCCGACTACATGG 480
Db 421 TGGTTCGCGCGTAAAGGTTGGCGAGGTTCGTTCTCGGCGACCGAGTTCGACTACATGG 480
QY 481 ATGTCTCGCGCGCCAGATGGTTCGGTTCGCGACCGCCATGATCCCGTTCTCTCGAGCAG 540

Db 481 ACGTCTCGCGCGCCAGATGGTTCGGTCCGACCCGATGATCCGTTCTCTCGAGCAG 540
QY 541 ACGACCCCAACCGTCCCTCATGGTGCCAAATGACAGCCGAGCGGTTCCGCTGGTGC 600
Db 541 ACGACCCCAACCGTCCCTCATGGTGCCAAATGACAGCCGAGCGGTTCCGCTGGTGC 600
QY 601 GTAGCAGGCTCGCTGGTTCGGTACC 626
Db 601 GCAGCGAGGCGCGCTGGTTCGGTACC 626

RESULT 13

US-09-285-306-41
; Sequence 41, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; EARLIER FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 41
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-41

Query Match 91.8%; Score 574.8; DB 9; Length 626;
Best Local Similarity 94.9%; Pred. No. 4.8e-137;
Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;
QY 1 TCCGTCCCGTCTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCCAGCTGTGCGAGTTCA 60
Db 1 TCCGTCCCGTCTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCCAGCTGTGCGAGTTCA 60
QY 61 TGGACCAAGAAACCCCGTCTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCCAGCTGTGCGAGTTCA 120
Db 61 TGGACCAAGAAACCCCGTCTGGCGCGATCAAGGAGTTCTTCGGAACCAAGCCAGCTGTGCGAGTTCA 120
QY 121 CCGGTGGTCTGACCCGCTGACCCGCGCGCTCGAGTTCGCGACGTGACCCCTCGCACT 180
Db 121 CCGGTGGTCTGACCCGCTGACCCGCGCGCTCGAGTTCGCGACGTGACCCCTCGCACT 180
QY 181 ACGCGCGATGTGCCGATCGAGACCCCGGAAGCCGGAACATCGGCTGATCGGCTCGC 240
Db 181 ACGCGCGATGTGCCGATCGAGACCCCGGAAGCCGGAACATCGGCTGATCGGCTCGC 240
QY 241 TGTGGTGTACCGCGGCTCAACCGTTCCGTTTCATCGAGCGCTTACCGAAGGTCT 300
Db 241 TTTGGTGTACCGCGGCTCAACCGTTCCGTTTCATCGAGCGCTTACCGAAGGTCT 300
QY 301 CGGACGAGGTGTTCACCGACGACATCCACTACCTGACCGCGCGACGAGAGGACCGCCACG 360
Db 301 CCGAGGTGTGCTCACCGACGAGATCCACTACCTGACCGCGCGACGAGAGGACCGCCACG 360
QY 361 TGGTGGCGAGGCGCAACTCGCCCGTGGACGCAACCGCGCTTCAACGAGGAGAGATCC 420
Db 361 TCGTGGCACAGGCGCAACTCGCCCGTGGATCGGACGCGCGCTTCAACGAGGAGATCC 420
QY 421 TGGTTCGCGCAAGGCGCGAGGTGGAGTTCTGTTCTGGCGACCGAGTCCGACTACATGG 480
Db 421 TGGTTCGCGCGTAAAGGTTGGCGAGGTTCGTTCTCGGCGACCGAGTTCGACTACATGG 480
QY 481 ATGTCTCGCGCGCCAGATGGTTCGGTTCGCGACCGCCATGATCCCGTTCTCTCGAGCAG 540
Db 481 ACGTCTCGCGCGCCAGATGGTTCGGTTCGCGACCGCCATGATCCCGTTCTCTCGAGCAG 540

QY 541 ACAGCCCAACCGTGCCTCATGGGTGCCAATGAGCCCAAGGCGGTTCCGCTGGTGC 600
Db 541 ACAGCCCAACCGTGCCTCATGGGTGCCAATGAGCCCAAGGCGGTTCCGCTGGTGC 600
QY 601 GTAGCGAGGCTCCGCTGGTCCGTACC 626
Db 601 GCAGCGAGGCCCGCTGGTCCGTACC 626

RESULT 14

US-09-285-306-42
; Sequence 42, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 42
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-42

Query Match 91.8%; Score 574.8; DB 9; Length 626;
Best Local Similarity 94.9%; Pred. No. 4.8e-137;
Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGCTGCGCGCGATCAAGAGTTCTTCGGAAACCCAGCAGCTGCGCAGTTCA 60
Db 1 TCCGTCCTCGCTGCGCGCGATCAAGAGTTCTTCGGAAACCCAGCAGCTGCGCAGTTCA 60
QY 61 TGGACCAAGAAACACCCCGCTGTCGGGCTGACCCCAAGCGTCGTCGTGCGGCTGGGCC 120
Db 61 TGGACCAAGAAACACCCCGCTGTCGGGCTGACCCCAAGCGTCGTCGTGCGGCTGGGCC 120
QY 121 CCGGTGCTTACCCGCTGACCGCGCGCTCGAGGTCGCGAGTGCGACCCCTCGCACT 180
Db 121 CCGGTGCTTACCCGCTGACCGCGCTCGAGGTCGCGAGTGCGACCCCTCGCACT 180
QY 181 ACGCCCGCATGTGCCCGATCGAGACCCCGGAAGCCGAAACATCGGCTGATCGGCTGC 240
Db 181 ACGCCCGCATGTGCCCGATCGAGACCCCGGAAGCCGAAACATCGGCTGATCGGCTGC 240
QY 241 TGTGGGTGTACCGCGGCTCAACCCGTTTCGGTTTCATCGAGACGCTTTACCGGAAGGTC 300
Db 241 TTTGGGTGTACCGCGGCTCAACCCGTTTCGGTTTCATCGAGACGCTTTACCGGAAGGTC 300
QY 301 CGGACGAGTTGTACCGACACATCCACTACCTGACCGCGCGAGAGAGACCGCCACG 360
Db 301 CGGACGAGTTGTACCGACACATCCACTACCTGACCGCGCGAGAGAGACCGCCACG 360
QY 361 TGGTGGCGAGCCAACTCGCGCTGGAGCGCAACCGCGCTTACCGAGGAGAGATCC 420
Db 361 TCGTGGACAGCCCACTCGCTGTGATGCGAGCGCGCTTACCGAGGACAGATCC 420
QY 421 TGGTTTCGCGCAAGGCGCGAGGTGGAGTTCTGTGCGCGACCGAGTGCATCATGG 480
Db 421 TGGTTTCGCGCAAGGCGCGAGGTGGAGTTCTGTGCGCGACCGAGTGCATCATGG 480
QY 481 ATGTTCTCGCGCGCAGATGTTGTCGTCGCGACCGCCATATCCGTTCTTCGAGCAG 540
Db 481 ACCTCTCGCGCGCAGATGTTGTCGTCGCGACCGCCATATCCGTTCTTCGAGCAG 540
QY 541 ACAGCCCAACCGTGCCTCATGGGTGCCAATGAGCCCAAGGCGGTTCCGCTGGTGC 600

Db 541 ACAGCCCAACCGTGCCTCATGGGTGCCAATGAGCCCAAGGCGGTTCCGCTGGTGC 600
QY 601 GTAGCGAGGCTCCGCTGGTCCGTACC 626
Db 601 GCAGCGAGGCCCGCTGGTCCGTACC 626

RESULT 15

US-09-285-306-43
; Sequence 43, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 43
; LENGTH: 626
; TYPE: DNA
; ORGANISM: Mycobacterium chelonae
US-09-285-306-43

Query Match 91.8%; Score 574.8; DB 9; Length 626;
Best Local Similarity 94.9%; Pred. No. 4.8e-137;
Matches 594; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

QY 1 TCCGTCCTCGCTGCGCGCGATCAAGAGTTCTTCGGAAACCCAGCAGCTGCGCAGTTCA 60
Db 1 TCCGTCCTCGCTGCGCGCGATCAAGAGTTCTTCGGAAACCCAGCAGCTGCGCAGTTCA 60
QY 61 TGGACCAAGAAACACCCCGCTGTCGGGCTGACCCCAAGCGTCGTCGTGCGGCTGGGCC 120
Db 61 TGGACCAAGAAACACCCCGCTGTCGGGCTGACCCCAAGCGTCGTCGTGCGGCTGGGCC 120
QY 121 CCGGTGCTTACCCGCTGACCGCGCGCTCGAGGTCGCGAGTGCGACCCCTCGCACT 180
Db 121 CCGGTGCTTACCCGCTGACCGCGCGCTCGAGGTCGCGAGTGCGACCCCTCGCACT 180
QY 181 ACGCCCGCATGTGCCCGATCGAGACCCCGGAAGCCGAAACATCGGCTGATCGGCTGC 240
Db 181 ACGCCCGCATGTGCCCGATCGAGACCCCGGAAGCCGAAACATCGGCTGATCGGCTGC 240
QY 241 TGTGGGTGTACCGCGGCTCAACCCGTTTCGGTTTCATCGAGACGCTTTACCGGAAGGTC 300
Db 241 TTTGGGTGTACCGCGGCTCAACCCGTTTCGGTTTCATCGAGACGCTTTACCGGAAGGTC 300
QY 301 CGGACGAGTTGTACCGACACATCCACTACCTGACCGCGCGAGAGAGACCGCCACG 360
Db 301 CGGACGAGTTGTACCGACACATCCACTACCTGACCGCGCGAGAGAGACCGCCACG 360
QY 361 TGGTGGCGAGCCAACTCGCGCTGGAGCGCAACCGCGCTTACCGAGGAGAGATCC 420
Db 361 TCGTGGACAGCCCACTCGCTGTGATGCGAGCGCGCTTACCGAGGACAGATCC 420
QY 421 TGGTTTCGCGCAAGGCGCGAGGTGGAGTTCTGTGCGCGACCGAGTGCATCATGG 480
Db 421 TGGTTTCGCGCAAGGCGCGAGGTGGAGTTCTGTGCGCGACCGAGTGCATCATGG 480
QY 481 ATGTTCTCGCGCGCAGATGTTGTCGTCGCGACCGCCATATCCGTTCTTCGAGCAG 540
Db 481 ACCTCTCGCGCGCAGATGTTGTCGTCGCGACCGCCATATCCGTTCTTCGAGCAG 540
QY 541 ACAGCCCAACCGTGCCTCATGGGTGCCAATGAGCCCAAGGCGGTTCCGCTGGTGC 600
Db 541 ACAGCCCAACCGTGCCTCATGGGTGCCAATGAGCCCAAGGCGGTTCCGCTGGTGC 600

QY 601 GTAGGAGGCTCGCTGTCGGTACC 626
Db 601 GCAGCGAGGCCCGCTGGTCGGTACC 626

Search completed: August 20, 2004, 01:36:34
Job time : 363.256 secs

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GenCore version 5.1.1.6
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OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 12:36:51 ; Search time 58.999 Seconds
(without alignments)
5888.223 Million cell updates/sec

Title: US-09-285-306-2

Perfect score: 626

Sequence: 1 tccgtccgctgctggcg... aggtccgctgctggctacc 626

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents NA: *
1: /cgn2_6/ptodata/2/ina/5A-COMB.seq: *
2: /cgn2_6/ptodata/2/ina/5B-COMB.seq: *
3: /cgn2_6/ptodata/2/ina/6A-COMB.seq: *
4: /cgn2_6/ptodata/2/ina/6B-COMB.seq: *
5: /cgn2_6/ptodata/2/ina/PCTUS-COMB.seq: *
6: /cgn2_6/ptodata/2/ina/backfiles1.seq: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Match	Query Length	ID	Description
1	480.4	76.7	706	3	US-09-797-812-24
2	480.4	76.7	4403765	3	Sequence 24, Appl
3	480.4	76.7	4411529	3	Sequence 2, Appl
4	470.6	75.2	620	2	US-09-103-840A-1
5	470.6	75.2	620	2	Sequence 1, Appl
6	470.6	75.2	620	2	Sequence 135, Appl
7	470.6	75.2	620	4	Sequence 138, Appl
8	470.6	75.2	620	4	Sequence 135, Appl
9	470.6	75.2	620	4	Sequence 138, Appl
10	469	74.9	620	2	US-09-520-946-138
11	469	74.9	620	2	Sequence 138, Appl
12	469	74.9	620	2	US-09-520-946-138
13	469	74.9	620	2	Sequence 135, Appl
14	469	74.9	620	2	Sequence 138, Appl
15	469	74.9	620	4	US-09-520-946-138
16	469	74.9	620	4	Sequence 135, Appl
17	469	74.9	620	4	Sequence 138, Appl
18	469	74.9	620	4	US-09-520-946-138
19	469	74.9	620	4	Sequence 135, Appl
20	469	74.9	620	4	US-09-520-946-138
21	469	74.9	620	4	Sequence 138, Appl
22	456.4	72.9	3447	2	US-09-655-378A-139
23	456.4	72.9	3447	2	Sequence 140, Appl
24	447.2	71.4	970	1	US-09-313-185-57
25	447.2	71.4	970	1	Sequence 57, Appl
26	363	58.0	706	3	Sequence 1, Appl
27	325	51.9	4074	4	PCT-US95-06790-1
					US-09-797-812-25
					US-09-252-991A-4737

28	325	51.9	4092	4	US-09-252-991A-4771	Sequence 4771, Ap
29	322.4	51.5	4083	4	US-09-489-039A-22	Sequence 22, Appl
30	322.4	51.5	4206	4	US-09-489-039A-30	Sequence 30, Appl
31	262.2	41.9	4167	4	US-09-543-681A-3177	Sequence 3177, Ap
32	252.8	40.4	11935	4	US-09-634-238-401	Sequence 401, App
33	247.2	39.5	2964	4	US-09-540-236-1097	Sequence 1097, Ap
34	247.2	39.5	3163	4	US-09-596-002-20	Sequence 20, Appl
35	245.6	39.2	4143	4	US-09-328-352-4006	Sequence 4006, Ap
36	238.2	38.1	1830121	4	US-09-557-884-1	Sequence 1, Appl
37	238.2	38.1	1830121	4	US-09-643-990A-1	Sequence 1, Appl
38	237.8	38.0	14672	4	US-08-961-527-111	Sequence 111, App
39	237.6	38.0	432	2	US-08-313-185-59	Sequence 59, Appl
40	237.6	38.0	432	3	US-09-082-614A-59	Sequence 59, Appl
41	215.4	34.4	324	4	US-08-750-088A-36	Sequence 36, Appl
42	215.4	34.4	324	4	US-09-722-319-36	Sequence 36, Appl
43	209	33.4	15598	4	US-08-956-171E-82	Sequence 82, Appl
44	208	33.2	1230025	4	US-09-198-452A-1	Sequence 1, Appl
45	202.6	32.4	2205	4	US-09-134-000C-2197	Sequence 2197, Ap

ALIGNMENTS

RESULT 1
US-08-797-812-24
; Sequence 24, Application US/08797812
; Patent No. 6228575
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas A.
; APPLICANT: Mack, David
; APPLICANT: Chee, Mark S.
; APPLICANT: Berno, Anthony J.
; APPLICANT: Strayer, Lubert
; APPLICANT: Ghandour, Ghassan
; APPLICANT: Wang, Ching
; TITLE OF INVENTION: Chip-Based Species Identification and
; TITLE OF INVENTION: Phenotypic Characterization of Microorganisms
; NUMBER OF SEQUENCES: 36
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Townsend and Townsend and Crew LLP
; STREET: Two Embarcadero Center, 8th Floor
; CITY: San Francisco
; STATE: CA
; COUNTRY: USA
; ZIP: 94111
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION NUMBER: US/08797,812
; FILING DATE: 07-FEB-1997
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/017,765
; FILING DATE: 15-MAY-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/629,031
; FILING DATE: 08-APR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/012,631
; FILING DATE: 01-MAR-1996
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/011,339
; FILING DATE: 08-FEB-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Fitts, Renee A.
; REGISTRATION NUMBER: 35,136
; REFERENCE/DOCKET NUMBER: 16528X-018550
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-326-2400
; TELEFAX: 415-326-2422

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; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
;   LENGTH: 706 base pairs
;   TYPE: nucleic acid
;   STRANDEDNESS: single
;   TOPOLOGY: linear
;   MOLECULE TYPE: cDNA
;   US-08-797-812-24

Query Match      76.7%; Score 480.4; DB 3; Length 706;
Best Local Similarity 85.5%; Pred. No. 1.5e-96;
Matches 535; Conservative 0; Mismatches 91; Indels 0; Gaps 0;

QY 1 TCCGTCCCGTGGTGGCGGCGATCAAGGAGTCTTCGGAACACGACGACTGTCGAGTTCA 60
DB 44 TCCGGCCGGTGGTGGCGGCGATCAAGGAGTCTTCGGAACACGACGACTGTCGAGTTCA 103
QY 61 TGGACCAAGAACACCCCGCTGTCGGGCTGACCCACAGCGTCTGTCGCGCGCTGGGC 120
DB 104 TGGACCAAGAACACCCCGCTGTCGGGCTGACCCACAGCGTCTGTCGCGCGCTGGGC 163
QY 121 CCGTGTCTGTACCCGCTGACCGCGCGCTCGAGGTCGCGAGCTGCACCCCTCGCACT 180
DB 164 CCGCGGTCTGTACCGGTGAGCGTCCGCGGCTGGAGGTCGCGAGCTGCACCCCTCGCACT 223
QY 181 ACGCCGCGATGTGCCCGATCGAGACCCCGGAAGCCCGAACATCGGCTGATCGGCTCGC 240
DB 224 ACGCCGCGATGTGCCCGATCGAACCCTGAGGGGCGCCCAACATCGGCTGATCGGCTCGC 283
QY 241 TGTGCGGTACCGCGCGGTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAAGTCT 300
DB 284 TGTGCGGTACCGCGCGGTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAAGTCT 343
QY 301 CGGACGAGTGTTCACCGACGACATCCACTACTGACGCGCGACGAGAGACCGCAAG 360
DB 344 TCGACGCGGTGTTCGACGACGAGATCGTGTACTGACGCGCGACGAGAGACCGCAAG 403
QY 361 TGTGGCGCGAGCCCACTCCCGTGGACGCGCGCGCGTTCACGAGAGAGATCC 420
DB 404 TGTGGCGAGAGCCCAATTCGCGCGATCGATCGGACGCGTTCGTCGAGCGCGGTGC 463
QY 421 TGGTTCGCGCAAGCGCGCGAGGTGGAGTTCGTTTCGCGACGCGAGTGCATACATGG 480
DB 464 TGGTTCGCGCAAGCGCGCGAGGTGGAGTTCGTTTCGCGACGCGAGTGCATACATGG 523
QY 481 ATGTCTCCCGCGCCAGATGTGTGCGTTCGCGACGCGCGATGATCCCGTTCCTCGAGCAAG 540
DB 524 ACGTCTCCCGCGCCAGATGTGTGCGTTCGCGACGCGCGATGATCCCGTTCCTCGAGCAAG 583
QY 541 ACGACGCGCAACCGTCCCTCATGGTGCCACATGCGAGCGCGAGCGTTCGCGTGGTC 600
DB 584 ACGACGCGCAACCGTCCCTCATGGTGCCACATGCGAGCGCGAGCGTTCGCGTGGTC 643
QY 601 GTAGCGAGGTCCTCGCTCGGTACC 626
DB 644 GTAGCGAGGTCCTCGCTCGGTACC 669

RESULT 2
US-09-103-840A-2
; Sequence 2, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; FILE REFERENCE: 24366-20007.00
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2

; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 4403765
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; FEATURE:
; OTHER INFORMATION: CDC 1551
; OTHER INFORMATION: "n" bases at various positions throughout the sequence
; OTHER INFORMATION: represent a, t, c or g
; US-09-103-840A-2

Query Match      76.7%; Score 480.4; DB 3; Length 4403765;
Best Local Similarity 85.5%; Pred. No. 4e-96;
Matches 535; Conservative 0; Mismatches 91; Indels 0; Gaps 0;

QY 1 TCCGTCCCGTGGTGGCGGCGATCAAGGAGTCTTCGGAACACGACGACTGTCGAGTTCA 60
DB 763005 TCCGGCCGGTGGTGGCGGCGATCAAGGAGTCTTCGGAACACGACGACTGTCGAGTTCA 763064
QY 61 TGGACCAAGAACACCCCGCTGTCGGGCTGACCCACAGCGTCTGTCGCGCGCTGGGC 120
DB 763065 TGGACCAAGAACACCCCGCTGTCGGGCTGACCCACAGCGTCTGTCGCGCGCTGGGC 763124
QY 121 CCGTGTCTGTACCCGCTGACCGCGCGCTCGAGGTCGCGAGCTGCACCCCTCGCACT 180
DB 763125 CCGCGGTCTGTACCGGTGAGCGTCCGCGGCTGGAGGTCGCGAGCTGCACCCCTCGCACT 763184
QY 181 ACGCCGCGATGTGCCCGATCGAGACCCCGGAAGCCCGAACATCGGCTGATCGGCTCGC 240
DB 763185 ACGCCGCGATGTGCCCGATCGAACCCTGAGGGGCGCCCAACATCGGCTGATCGGCTCGC 763244
QY 241 TGTGCGGTACCGCGCGGTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAAGTCT 300
DB 763245 TGTGCGGTACCGCGCGGTCAACCCGTTTCGTTTCATCGAGACGCTTACCGGAAGTCT 763304
QY 301 CGGACGAGTGTTCACCGACGACATCCACTACTGACGCGCGACGAGAGACCGCAAG 360
DB 763305 TCGACGCGGTGTTCGACGACGAGATCGTGTACTGACGCGCGACGAGAGACCGCAAG 763364
QY 361 TGTGGCGCGAGCCCACTCCCGTGGACGCGCGCGTTCACGAGAGAGATCC 420
DB 763365 TGTGGCGAGAGCCCAATTCGCGCGATCGATCGGACGCGTTCGTCGAGCGCGGTGC 763424
QY 421 TGGTTCGCGCAAGCGCGCGAGGTGGAGTTCGTTTCGCGACGCGAGTGCATACATGG 480
DB 763425 TGGTTCGCGCAAGCGCGCGAGGTGGAGTTCGTTTCGCGACGCGAGTGCATACATGG 763484
QY 481 ATGTCTCCCGCGCCAGATGTGTGCGTTCGCGACGCGCGATGATCCCGTTCCTCGAGCAAG 540
DB 763485 ACGTCTCCCGCGCCAGATGTGTGCGTTCGCGACGCGCGATGATCCCGTTCCTCGAGCAAG 763544
QY 541 ACGACGCGCAACCGTCCCTCATGGTGCCACATGCGAGCGCGAGCGTTCGCGTGGTC 600
DB 763545 ACGACGCGCAACCGTCCCTCATGGTGCCACATGCGAGCGCGAGCGTTCGCGTGGTC 763604
QY 601 GTAGCGAGGTCCTCGCTCGGTACC 626
DB 763605 GTAGCGAGGTCCTCGCTCGGTACC 763630

RESULT 3
US-09-103-840A-1
; Sequence 1, Application US/09103840A
; Patent No. 6294328
; GENERAL INFORMATION:
; APPLICANT: FLEISCHMAN, Robert D.
; APPLICANT: WHITE, Owen R.
; APPLICANT: FRASER, Claire M.
; APPLICANT: VENTER, John C.
; TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN ANALYSIS IN MYCOBACTERIUM
; FILE REFERENCE: 24366-20007.00
; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
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; CURRENT FILING DATE: 1998-06-24
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: Patent In Ver. 2.1
; SEQ ID NO 1
; LENGTH: 4411529
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1

Query Match 76.7%; Score 480.4; DB 3; Length 4411529;
Best Local Similarity 85.5%; Pred. No. 4e-96;
Matches 535; Conservative 0; Mismatches 91; Indels 0; Gaps 0;

QY 1 TCCGTCCTCCGTCGTCGGCGGATCAAGAGTCTTTCGGAACACGACGTCGTCGCAATCA 60
Db 761045 TCCGTCCTCCGTCGTCGGCGGATCAAGAGTCTTTCGGAACACGACGTCGTCGCAATCA 60
QY 61 TGGACACAGAAACACCCGCTGTCGGGCTGACCAACAGCGTCTGTCGGCGCTGGGCG 120
Db 761105 TGGACACAGAAACACCCGCTGTCGGGCTGACCAACAGCGTCTGTCGGCGCTGGGCG 120
QY 121 CCGGTGTCGTCACCCGTCGACCGCGCGGCTCGAGTCCGCGACGTGCAACCCCTCGCACT 180
Db 761165 CCGGTGTCGTCACCCGTCGACCGCGCGGCTCGAGTCCGCGACGTGCAACCCCTCGCACT 180
QY 181 ACGGCGCGATGTCGGCGATCGAGACCCCGGAGGCGCGACATCGCGCTGATCGGCTGCG 240
Db 761225 ACGGCGCGATGTCGGCGATCGAGACCCCGGAGGCGCGACATCGCGCTGATCGGCTGCG 240
QY 241 TGTGTCGTCGTCGCGGCTCAACCCGTCGCGTTCATCGAGACGCTTACCGGAAGGTCT 300
Db 761285 TGTGTCGTCGTCGCGGCTCAACCCGTCGCGTTCATCGAGACGCTTACCGGAAGGTCT 300
QY 301 CGGACGAGTGTTCACGACGATTCACATCTGACGCGCGCGACGAGGACCGCGACG 360
Db 761345 TCGACGCGGTGTTAGCGACGATCGTGTACCTGACCGCGCGACGAGGACCGCGACG 360
QY 361 TGTGTCGCGACGCGAATCTGCGCGTGGAGCGCAACGCGCGCTTACCGAGGAGATCC 420
Db 761405 TGTGTCGCGACGCGAATCTGCGCGTGGAGCGCAACGCGCGCTTACCGAGGAGATCC 420
QY 421 TGGTTCGCGCGAAGCGCGCGAGTGGAGTTCGTCGCGACCGAGTTCGACTACATGG 480
Db 761465 TGGTTCGCGCGAAGCGCGCGAGTGGAGTTCGTCGCGACCGAGTTCGACTACATGG 480
QY 481 ATGTCGTCGCGCGCGACGATGTCGTCGCGACCGCGCGATGATCCCTTCCTCGAGCAG 540
Db 761525 ACGTCTCGCGCGCGACGATGTCGTCGTCGCGACCGCGCGATGATCCCTTCCTCGAGCAG 540
QY 541 ACGACGCAACCGTCGCTCATGGTGCCCAACATCGAGCGCGCGGTCGCGTGGTGC 600
Db 761585 ACGACGCAACCGTCGCTCATGGTGCCCAACATCGAGCGCGCGGTCGCGTGGTGC 600
QY 601 GTAGCGAGGCTCCGTCGTCGCTAC 626
Db 761645 GTAGCGAGGCTCCGTCGTCGCTAC 626

RESULT 4

US-08-757-653-135
; Sequence 135, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermolabile FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200

; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; FILING DATE: US/08/757,653
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-757-653-135

Query Match 75.2%; Score 470.6; DB 2; Length 620;
Best Local Similarity 85.5%; Pred. No. 2.1e-94;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

QY 1 TCCGTCCTCCGTCGTCGGCGGATCAAGAGTCTTTCGGAACACGACGTCGTCGCAATCA 60
Db 8 TCCGTCCTCCGTCGTCGGCGGATCAAGAGTCTTTCGGAACACGACGTCGTCGCAATCA 67
QY 61 TGGACACAGAAACACCCGCTGTCGGGCTGACCCCAACAGCGCTGTCGCGCGCTGGGCG 120
Db 68 TGGACACAGAAACACCCGCTGTCGGGCTGACCCCAACAGCGCTGTCGCGCGCTGGGCG 127
QY 121 CCGGTGTCGTCACCCGTCGACCGCGCGGCTCGAGTCCGCGACGTCGACCCCTCGCACT 180
Db 128 CCGGTGTCGTCACCCGTCGACCGCGCGGCTCGAGTCCGCGACGTCGACCCCTCGCACT 187
QY 181 ACGGCGCGATGTCGCCGATCGAGACCCCGGAGGCGCGAATCGCGCTGATCGGCTCGC 240
Db 188 ACGGCGCGATGTCGCCGATCGAGACCCCGGAGGCGCGAATCGCGCTGATCGGCTCGC 247
QY 241 TGTGTCGTCGTCGCGCGGTCGTCGCGTTCGCTTCATCGAGACGCTTACCGGAAGGTCT 300
Db 248 TGTGTCGTCGTCGCGCGGTCGTCGCGTTCGCTTCATCGAGACGCTTACCGGAAGGTCT 307
QY 301 CGGACGAGTGTTCACCGACGACATCCACTACCTGACGCGCGCGAGGAGGACCGCGACG 360
Db 308 TCGACGCGGTGTTAGCGACGAGATCGGTACCTGACCGCGCGAGGAGGACCGCGACG 367
QY 361 TGGTGGCGACGCGCAACTCGCGCTGGACGCGCAACCGCGCGCTTACCGGAGAGATCC 420
Db 368 TGGTGGCGACGCGCAACTCGCGCTGGACGCGCAACCGCGCGCTTACCGGAGAGATCC 427
QY 421 TGGTTCGCGCGCAAGGCGCGAGTGGAGTTCGTCGCGACCGCGATGATCCGCTTCCTCGAGCAG 480
Db 428 TGGTTCGCGCGCAAGGCGCGAGTGGAGTTCGTCGCGACCGCGATGATCCGCTTCCTCGAGCAG 487
QY 481 ATGTCGTCGCGCGCGACGATGTCGTCGTCGCGACCGCGCGATGATCCGCTTCCTCGAGCAG 540
Db 488 ACGTCTCGCGCGCGCGACGATGTCGTCGTCGCGACCGCGCGATGATCCGCTTCCTCGAGCAG 547
QY 541 ACGACGCGCAACCGTCGCTCATGGTGCCCAACATCGAGCGCGCGGTCGCGTGGTGC 600
Db 548 ACGACGCGCAACCGTCGCTCATGGTGCCCAACATCGAGCGCGCGGTCGCGTGGTGC 607

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QY 601 GTAGCGAGGCTCC 613
Db 608 GTAGCGAGGCCCC 620

RESULT 5
US-08-757-653-138/c
; Sequence 138, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-138

Query Match 75.2%; Score 470.6; DB 2; Length 620;
Best Local Similarity 85.5%; Pred. No. 2.1e-94;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

QY 1 TCCGTCCCGTGGTGGCGGATCAAGGAGTTCTTCGGAACACGACGAGTGTGCGAGTTCA 60
Db 613 TCCGCGCGGTGGTGGCGGATCAAGGAGTTCTTCGGAACACGACGAGTGTGCGAGTTCA 554
QY 61 TGGACAGAGAACACCGCGTGTGCGGCTGACCCACAGAGTGTGCTGTGCGCGCTGGGC 120
Db 553 TGGACAGAGAACACCGCGTGTGCGGCTGACCCACAGAGTGTGCTGTGCGCGCTGGGC 494
QY 121 CCGGTGTGTGACCGGTGACCGCGCGGCTGCGAGGTCCGACGTCACCCCTCGCACT 180
Db 493 CCGCGGTGTGTGACCGGTGACCGCGCGGCTGCGAGGTCCGACGTCACCCCTCGCACT 434
QY 181 ACGGCCGATGTGCCCGATCGAGACCCCGGAGCCCGAACAATCGGCTGTGCGGTGCG 240
Db 433 ACGGCCGATGTGCCCGATCGAGACCCCGGAGCCCGAACAATCGGCTGTGCGGTGCG 374
QY 241 TGTGGTGTAGCGCGGGTCAACCGTTCGGTTTCATCGAGACCGCTTACCGAGGTCT 300
Db 373 TGTGGTGTAGCGCGGGTCAACCGTTCGGTTTCATCGAGACCGCTTACCGAGGTCT 314
QY 301 CGGACGGAGTTGTACCGAGACATCCACTACCTGACGGCGGACGAGGAGGACCGCCACG 360

Db 313 TCGACGCGTGGTTAGGACGAGATGCTGTACTCCGCGGAGGAGGACGCGCACG 254
QY 361 TGGTGGCGAGGCCAACTCGCCCGTGGACCGCCAAACGCGCTTCACCGAGGAGAGATCC 420
Db 253 TGGTGGCACAGGCCAAATTCGCCGATCGATGCGGACGCTGCTTCGTCGAGCCGCGTGC 194
QY 421 TGGTTCCCGCAAGGGCGGAGGTGGAGTTCGTGTGCGGACCGAGGTGACTACATGG 480
Db 193 TGGTCCGCGCAAGGGCGGAGGTGGAGTTCGTGTGCGGACCGAGGTGACTACATGG 134
QY 481 ATGCTCGCGCGCCAGATGCTGTGCGTCCGACCGCCATGATCCCGTTCCTCGAGCACG 540
Db 133 ACCTCTCGCCCCCGCAGATGCTGTGCGTCCGACCGCGATGATTCCTTCTCGAGCACG 74
QY 541 ACGACGCCAACCGTGCCTCATCGGTGCCAACATGACAGCCCGGCGGTTCGCTGTGTC 600
Db 73 ACGACGCCAACCGTGCCTCATCGGTGCCAACATGACAGCCCGGCGGTTCGCTGTGTC 14
QY 601 GTAGCGAGGCTCC 613
Db 13 GTAGCGAGGCCCC 1

RESULT 6
US-08-520-946-135
; Sequence 135, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-520-946-135

Query Match 75.2%; Score 470.6; DB 4; Length 620;
Best Local Similarity 85.5%; Pred. No. 2.1e-94;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

QY 1 TCCGTCCCGTGGTGGCGGATCAAGGAGTTCTTCGGAACACGACGAGTGTGCGAGTTCA 60

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Db 8 TCGGCGGTGTGTCGCGCGATCAAGAGTCTCTTGGACACGACGCTGAGCCATTCA 67
QY 61 TGGACAGAAACCCGCTGTGCGGCTGACCAAGCGTGTCTGTGCGGCTGGGCC 120
Db 68 TGGACAGAAACCCGCTGTGCGGCTGACCAAGCGGCTGAGCCATTCA 127
QY 121 CGGTTGCTGACCGGTGACCGCGCTGCGGCTGAGGTCGCGACGTCACCCCTGCACT 180
Db 128 CGGCGGTCTGACGTCGAGCGTGGCGGCTGAGGTCGCGACGTCACCCCTGCACT 187
QY 181 ACGGCGCATGTGTCGCGATCGAGACCCCGAAGCGCGCAACATCGGCTGATCGGCTCGC 240
Db 188 ACGGCGCATGTGTCGCGATCGAGACCCCGAAGCGCGCAACATCGGCTGATCGGCTCGC 247
QY 241 TGTGCTGTACCGGCTGACCGGCTGATCGGCTGATCGGCTGATCGGCTGATCGGCTGAT 300
Db 248 TGTGCTGTACCGGCTGACCGGCTGATCGGCTGATCGGCTGATCGGCTGATCGGCTGAT 307
QY 301 CGGACGGAGTGTGTCACCGACGATCCACTGACGCGCGCGCTTACCGAGGAGATCC 360
Db 308 TCGACGGCGTGTGTCGCGATCGAGTGTGTCGCGCGCGCTTACCGAGGAGATCC 367
QY 361 TGGTGGCGAGCCCAACTCGCGCTGAGCGCAACCGCGCGCTTACCGAGGAGATCC 420
Db 368 TGGTGGCGAGCCCAACTCGCGCTGAGCGCAACCGCGCGCTTACCGAGGAGATCC 427
QY 421 TGGTGGCGAGCCCAACTCGCGCTGAGCGCAACCGCGCGCTTACCGAGGAGATCC 480
Db 428 TGGTGGCGAGCCCAACTCGCGCTGAGCGCAACCGCGCGCTTACCGAGGAGATCC 487
QY 481 ATGCTCGCGCGCGAGTGTGTCGCGCGCGCGCTTACCGAGGAGATCC 540
Db 488 ACGTCTCGCGCGCGAGTGTGTCGCGCGCGCGCTTACCGAGGAGATCC 547
QY 541 ACGACGCAACCGCTCATGGTGTGCAACATCGAGCGCGCGCTTACCGAGGAGATCC 600
Db 548 ACGACGCAACCGCTCATGGTGTGCAACATCGAGCGCGCGCTTACCGAGGAGATCC 607
QY 601 GTAGCGAGGCTCC 613
Db 608 GTAGCGAGGCTCC 620

RESULT 7

US-08-520-946-138/c
; Sequence 138, Application US/08520946
; Patent No. 6372424
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/520,946
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-520-946-138

Query Match 75.2%; Score 470.6; DB 4; Length 620;
Best Local Similarity 85.5%; Pred. No. 2.1e-94;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

QY 1 TCGGTCGCGTGTGTCGCGGATCAAGAGTCTCTTGGACACGACGCTGAGCCATTCA 60
Db 613 TCGGTCGCGTGTGTCGCGGATCAAGAGTCTCTTGGACACGACGCTGAGCCATTCA 554
QY 61 TGGACAGAAACCCGCTGTGCGGCTGACCAAGCGTGTCTGTGCGGCTGGGCC 120
Db 553 TGGACAGAAACCCGCTGTGCGGCTGACCAAGCGGCTGAGCCATTCA 494
QY 121 CGGTTGCTGACCGGTGACCGCGCTGAGGTCGCGACGTCACCCCTGCACT 180
Db 493 CGGCGGTCTGTCACGTCGAGCGTGGAGGTCGCGACGTCGACCGCTGCACT 434
QY 181 ACGGCGCATGTGTCGCGATCGAGACCCCGAAGCGCGCAACATCGGCTGATCGGCTCGC 240
Db 433 ACGGCGCATGTGTCGCGATCGAGACCCCGAAGCGCGCAACATCGGCTGATCGGCTCGC 374
QY 241 TGTGCTGTACGCGCGGTCAACCGCTTTCGAGTTCATCGAGACGCTTACCGAGGAGTCT 300
Db 373 TGTGCTGTACGCGCGGTCAACCGCTTTCGAGTTCATCGAGACGCTTACCGAGGAGTCT 314
QY 301 CGGACGAGTGTGTCACCGACGATCCACTACCTGACGCGCGCGCAAGAGGAGCCGCGCAG 360
Db 313 TCGACGCGGTGTTAGCGACGAGATCGTGTACCTGACCGCGCGAGGAGGAGCCGCGCAG 254
QY 361 TGGTGGCGAGCCCAACTCGCGCTGAGCGCAACCGCGCGCTTACCGAGGAGATCC 420
Db 253 TGGTGGCGAGCCCAACTCGCGCTGAGCGCAACCGCGCGCTTACCGAGGAGATCC 194
QY 421 TGGTTCGCGCGCAAGCGCGCGAGTGTGTCGCGCGCGCGCTTACCGAGGAGATCC 480
Db 193 TGGTTCGCGCGCAAGCGCGCGAGTGTGTCGCGCGCGCGCTTACCGAGGAGATCC 134
QY 481 ATGCTCGCGCGCGAGATGTGTCGTCGCGACCGCGCATGATCCGCTTCTCGAGGAG 540
Db 133 ACGTCTCGCGCGCGAGATGTGTCGTCGCGACCGCGCATGATCCCTTCTGAGGAG 74
QY 541 ACGACGCAACCGCTCATGGTGTGCAACATCGAGCGCGCGCTTACCGAGGAGATCC 600
Db 73 ACGACGCAACCGCTCATGGTGTGCAACATCGAGCGCGCGCTTACCGAGGAGATCC 14
QY 601 GTAGCGAGGCTCC 613
Db 13 GTAGCGAGGCTCC 1

RESULT 8

US-09-655-378A-135
; Sequence 135, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; NUMBER OF SEQUENCES: 165

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CORRESPONDENCE ADDRESS:
ADDRESSEE: MEDLEN & CARROLL
STREET: 220 MONTGOMERY STREET, SUITE 2200
CITY: SAN FRANCISCO
STATE: CALIFORNIA
COUNTRY: UNITED STATES OF AMERICA
ZIP: 94104

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
  APPLICATION NUMBER: US/09/655.378A
  FILING DATE: 05-Sep-2000
  CLASSIFICATION: <unknown>
  NAME: CARROLL, PETER G.
  REGISTRATION NUMBER: 32,837
  REFERENCE/DOCKET NUMBER: FORS-01756
TELECOMMUNICATION INFORMATION:
  TELEPHONE: (415) 705-8410
  TELEFAX: (415) 397-8338
INFORMATION FOR SEQ ID NO: 135:
SEQUENCE CHARACTERISTICS:
  LENGTH: 620 base pairs
  TYPE: nucleic acid
  STRANDEDNESS: double
  TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-655-378A-135

Query Match      75.2%; Score 470.6; DB 4; Length 620;
Best Local Similarity 85.5%; Pred. No. 2.1e-94;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

Qy 1 TCCGTCCTCCGTCGTCGCGCGCATCAAGGAGTTCTTCGGAACCCAGCAGCTGTCGCGAGTTCA 60
Db 8 TCCGCGCGGTGTCGCGCGCATCAAGGAGTTCTTCGGAACCCAGCAGCTGTCGCGAGTTCA 67
Qy 61 TGGACCAAGAACCAACCCGCTGTCGCGGCTTGACCCCAAGCGTCTGTCGTCGCGCTGGGCC 120
Db 68 TGGACCAAGAACCAACCCGCTGTCGCGGTTTGACCCCAAGCGGCTGTCGCGCTGGGCC 127
Qy 121 CCGTGTGTCTGACCCGTCACCGCGCGGCTCTGAGGTCGCGGAGTGTCGACCCCTCGCACT 180
Db 128 CCGCGCGTCTGTACGTGAGCGTGCCTGGGCTTGGAGGTCCGCGAGCTGCACCCGTCGCACT 187
Qy 181 ACGGCGCGCATGTGCCCGATCGAGACCCCGGAAGCCCGAACATCGGCTGATCGGCTCGC 240
Db 188 ACGGCGCGATGTGCCCGATCGAACCCTTGAAGGCGCCCAACATCGTCTGATCGGCTCGC 247
Qy 241 TGTCCGTTGATACGCGGGGTCAACCGTTTCGTTTCATCGAGACGCTTACCGGAAGTCT 300
Db 248 TGTCCGTTGATACGCGGGGTCAACCGTTTCGTTTCATCGAGACGCTTACCGGAAGTCT 307
Qy 301 CGGACGAGTTGTACCGACACATCCACTACCTGACGCGCGGACGAGAGACCGCCACG 360
Db 308 TCGACGCGCGTGTGTAGCGACGAGATCGTGTACCTGACCGCGGACGAGAGACCGCCACG 367
Qy 361 TGGTGGCGCGAGCAACCTCGCGCGTGGACGCAACCGCGGCTTCAACCGAGGAGAGATCC 420
Db 368 TGGTGGCACAGCCCAATTCCCGATCGATCGGACGGTTCGTTCTGAGCGCGCGTGC 427
Qy 421 TGGTTCGCGCGCAAGGCGCGGAGTGGAGTTCTGTTGCGGCGACCGAGTGCATGATGG 480
Db 428 TGGTTCGCGCGCAAGGCGCGGAGTGGAGTACGTGCTCTCTCTGAGTGGACTACATGG 487
Qy 481 ATGTCGCGCGCGCAGATGTTGTCGTCGCGACCGGATGATCCCGTTCTCTCGAGCACG 540
Db 488 ACGTCTCGCGCGCGCAGATGTTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 547

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Qy 541 ACAGCGCAACACCGTCGCTCATGGTGCACCAATGACGCGCCAGCGGTTCCGCTGTGC 600
Db 548 ACAGCGCAACACCGTCGCTCATGGTGCACCAATGACGCGCCAGCGGTTCCGCTGTGC 607
Qy 601 GTAGCGAGGCTCC 613
Db 608 GTAGCGAGGCCCC 620

RESULT 9
US-09-655-378A-138/c
; Sequence 138, Application US/09655378A
; Patent No. 6673616
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; LYAMICHEV, VICTOR I.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/655.378A
; FILING DATE: 05-Sep-2000
; CLASSIFICATION: <unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 138:
US-09-655-378A-138

Query Match      75.2%; Score 470.6; DB 4; Length 620;
Best Local Similarity 85.5%; Pred. No. 2.1e-94;
Matches 524; Conservative 0; Mismatches 89; Indels 0; Gaps 0;

Qy 1 TCCGTCCTCCGTCGTCGCGCGCATCAAGGAGTTCTTCGGAACCCAGCAGCTGTCGCGAGTTCA 60
Db 613 TCCGCGCGGTGTCGCGCGCATCAAGGAGTTCTTCGGAACCCAGCAGCTGTCGCGAGTTCA 554
Qy 61 TGGACCAAGAACCAACCCGCTGTCGCGGCTTGACCCCAAGCGTCTGTCGTCGCGCTGGGCC 120
Db 553 TGGACCAAGAACCAACCCGCTGTCGCGGTTTGACCCCAAGCGGCTGTCGCGCTGGGCC 494
Qy 121 CCGTGTGTCTGACCCGTCACCGCGCGGCTCTGAGGTCGCGGAGTGTCGACCCCTCGCACT 180
Db 493 CCGCGGTCTGTACGTGAGCGTCCGCGGCTTGGAGGTCCGCGAGTGCACCCGTCGCACT 434
Qy 181 ACGGCGCGCATGTGCCCGATCGAGACCCCGGAAGCCCGAACATCGGCTGATCGGCTCGC 240
Db 433 ACGGCGCGATGTGCCCGATCGAACCCTTGAAGGCGCCCAACATCGGCTGATCGGCTCGC 374

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QY 241 TGTGCGGTATACCGCGGTCACCGGTTCCGTTTCATCGAGACGCTTACCGGAAGTCT 300
 Db |||||
 QY 373 TGTGCGGTATACCGCGGTCACCGGTTCCGTTTCATCGAAACGCGTACCGCAAGTGG 314
 Db |||||
 QY 301 CGGACGAGTTTFCACCGACGATCCTACCTGACGGCCGACGAGAGACCGCCACG 360
 Db |||||
 QY 313 TCACGCGCGTGTAGCGACGAGATCGTTACCTGACCGCCGACGAGGAGACCGCCACG 254
 Db |||||
 QY 361 TGTGCGCGACGCAACTCGCCCGTGCAGCCCAACGCGCGCTTACCGAGGAGAGATCC 420
 Db |||||
 QY 253 TGTGCGCAAGGCAATTCGCGATCGATCGGACGCTCGCTTCGTCGAGCGCGCGTGC 194
 Db |||||
 QY 421 TGTGCGCGCGCGCGCGAGGTTCGTTGTCGCGACCGAGGTTCGACTACATGG 480
 Db |||||
 QY 193 TGTGCGCGCGCGCGCGAGGTTCGTTGTCGCGCGCGAGGTTCGACTACATGG 134
 Db |||||
 QY 481 ATGTCTCGCGCGCGCGAGGTTCGTTGTCGCGCGCGAGGTTCGACTACATGG 540
 Db |||||
 QY 133 AGTCTCTCGCGCGCGCGAGGTTCGTTGTCGCGCGCGAGGTTCGACTACATGG 74
 Db |||||
 QY 541 ACAGCCCAACCGTCCCTCATGGTGCACCAATGCGAGCGCGCGAGGTTCGACTACATGG 600
 Db |||||
 QY 73 AGACGCCCAACCGTCCCTCATGGTGCACCAATGCGAGCGCGCGAGGTTCGACTACATGG 14
 Db |||||
 QY 601 GTAGCGAGGCTCC 613
 Db |||||
 QY 13 GTAGCGAGGCCCC 1

RESULT 10
 US-08-757-653-136
 ; Sequence 136, Application US/08757653
 ; Patent No. 5843669
 ; GENERAL INFORMATION:
 ; APPLICANT: Kaiser, Michael W.
 ; APPLICANT: Lyamichiev, Victor I.
 ; APPLICANT: Lyamichiev, Natasha
 ; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
 ; NUMBER OF SEQUENCES: 190
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Medlen & Carroll, LLP
 ; STREET: 220 Montgomery Street, Suite 2200
 ; CITY: San Francisco
 ; STATE: California
 ; COUNTRY: United States Of America
 ; ZIP: 94104
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/757,653
 ; FILING DATE:
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Ingolia, Diane E.
 ; REGISTRATION NUMBER: 40,027
 ; REFERENCE/DOCKET NUMBER: FORS-02565
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 705-8410
 ; TELEFAX: (415) 397-8338
 ; INFORMATION FOR SEQ ID NO: 136:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 620 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: double
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: DNA (genomic)
 ; US-08-757-653-136
 Query Match 74.9%; Score 469; DB 2; Length 620;

Best Local Similarity 85.3%; Pred. No. 4.7e-94;
 Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;
 QY 1 TCCTGTCCTGTCGTCGCGGATCAAGGAGTTCCTCGGAAACGACGAGCTGTCGAGTTCA 60
 Db |||||
 QY 8 TCCTGTCCTGTCGTCGCGGATCAAGGAGTTCCTCGGAAACGACGAGCTGTCGAGTTCA 67
 Db |||||
 QY 61 TGACACAGAAACACCGCTGTCGCGGCTGACCAAGCGTCTGTCGTCGCGCTGCGGC 120
 Db |||||
 QY 68 TGACACAGAAACACCGCTGTCGCGGCTGACCAAGCGTCTGTCGTCGCGCTGCGGC 127
 Db |||||
 QY 121 CGCTGTCCTGACCCGCTGACCGCGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGCGGC 180
 Db |||||
 QY 128 CGCTGTCCTGACCCGCTGACCGCGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGCGGC 187
 Db |||||
 QY 181 ACCTGTCCTGTCGCGGATCGAGACCGCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGCGGC 240
 Db |||||
 QY 188 ACCTGTCCTGTCGCGGATCGAGACCGCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGCGGC 247
 Db |||||
 QY 241 TGTGTCGTCGCGGCTGACCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGCGGC 300
 Db |||||
 QY 248 TGTGTCGTCGCGGCTGACCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGCGGC 307
 Db |||||
 QY 301 CGGACGAGTTCGTCGCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGCGGC 360
 Db |||||
 QY 308 TGTGTCGTCGCGGCTGACCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGCGGC 367
 Db |||||
 QY 361 TGTGTCGTCGCGGCTGACCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGCGGC 420
 Db |||||
 QY 368 TGTGTCGTCGCGGCTGACCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGCGGC 427
 Db |||||
 QY 421 TGTGTCGTCGCGGCTGACCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGCGGC 480
 Db |||||
 QY 428 TGTGTCGTCGCGGCTGACCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGCGGC 487
 Db |||||
 QY 481 ATGTCTCGCGGCTGACCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGCGGC 540
 Db |||||
 QY 488 AGTCTCGCGGCTGACCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGAGGTTCGCGGCTGCGGC 547
 Db |||||
 QY 541 ACAGCCCAACCGTCCCTCATGGTGCACCAATGCGAGCGCGCGAGGTTCGCGGCTGCGGC 600
 Db |||||
 QY 548 ACAGCCCAACCGTCCCTCATGGTGCACCAATGCGAGCGCGCGAGGTTCGCGGCTGCGGC 607
 Db |||||
 QY 601 GTAGCGAGGCTCC 613
 Db |||||
 QY 608 GTAGCGAGGCCCC 620

RESULT 11
 US-08-757-653-137
 ; Sequence 137, Application US/08757653
 ; Patent No. 5843669
 ; GENERAL INFORMATION:
 ; APPLICANT: Kaiser, Michael W.
 ; APPLICANT: Lyamichiev, Victor I.
 ; APPLICANT: Lyamichiev, Natasha
 ; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
 ; NUMBER OF SEQUENCES: 190
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Medlen & Carroll, LLP
 ; STREET: 220 Montgomery Street, Suite 2200
 ; CITY: San Francisco
 ; STATE: California
 ; COUNTRY: United States Of America
 ; ZIP: 94104
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/757,653

```
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 137:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-137

Query Match      74.9%; Score 469; DB 2; Length 620;
Best Local Similarity 85.3%; Pred. No. 4.7e-94;
Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;

Qy 1 TCCGTCCTCCGTCGTGGCGCGCATCAAGGAGTTCTTTCGGAACCAAGCCAGCTGTCGAGTTCA 60
Db |||||
Qy 8 TCCGCGCGGTGGTCCGCGCGATCAAGGAGTTCTTTCGCAACCAAGCCAGCTGAGCCAAATCA 67
Db |||||
Qy 61 TGGACCAAGAAACACCCGCTGTCGGGCTGACCCACACAGCTGCTGTCGGGCTGGGCC 120
Db |||||
Qy 68 TGGACCAAGAAACACCCGCTGTCGGGCTGACCCACACAGCTGTCGCTGTCGCTGCGC 127
Db |||||
Qy 121 CCGGTGGTCTCACCCGTGACCGCGCGCGCTCGAGGTCGGGAGCTGCACCCCTCGCACT 180
Db |||||
Qy 128 CCGCGGTCTCTACGTGAGGTGTCGGGCTGAGGTCGGGAGCTGCGACCCCTCGCACT 187
Db |||||
Qy 181 ACGCCCGCATGTGCCCGATCGAGACCCCGGAAGCCGAAACATCGGCTGATCGGCTGC 240
Db |||||
Qy 188 ACGCCCGCATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGTCTGATCGGCTGC 247
Db |||||
Qy 241 TGTGGTGTACCGCGGGTCAACCGTTTCGGTTTCATCGACGCGCTTACCGGAGTCT 300
Db |||||
Qy 248 TGTGGTGTACCGCGGGTCAACCGTTTCGGTTTCATCGAAACGCGCTTACCGGAGTGG 307
Db |||||
Qy 301 CGGACGAGTTGTTCACCAAGACATCCACTACTGACGCGCGCAAGAGGACCGCCACG 360
Db |||||
Qy 308 TCGACGCGGTGGTGTAGCGACGAGATCTGTACTGACCGCGCAAGAGGACCGCCACG 367
Db |||||
Qy 361 TGGTGGCGCAGCCAACTCGCCCGTGGACGCAACCGCGCTTCAACGAGGAGAGATCC 420
Db |||||
Qy 368 TGGTGGCACAGGCCAAATTCGCGCATCGATCGGACGCTTCTGTCGAGCGCGCGCTGC 427
Db |||||
Qy 421 TGGTTCGCGCAAGGCGGAGGTGGAGTTCTGTCGCGGACCGAGGTGCACTACATGG 480
Db |||||
Qy 428 TGGTTCGCGCAAGGCGGAGGTGGAGTTCTGTCGCGGACCGAGGTGCACTACATGG 487
Db |||||
Qy 481 ATGTCCTCCCGCGCCAGATGTTGTCGTCGCGACCGCCCATGATCCCGTTCCTCGAGCACG 540
Db |||||
Qy 488 ACGTCTCCCGCGCCAGATGTTGTCGTCGTCGCGACCGCGATGATTCCTTCCTGGAGCAG 547
Db |||||
Qy 541 ACAGCGCAACCGTGCCTCATGTTGTCGCAACATGACGAGCGCGGTCGCTGCTGGTGC 600
Db |||||
Qy 548 ACAGCGCAACCGTGCCTCATGTTGTCGCAACATGACGAGCGCGGTCGCTGCTGGTGC 607
Db |||||
Qy 601 GTAGCGAGGCTCC 613
Db |||||
Qy 608 GTAGCGAGGCCCC 620
Db |||||
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RESULT 12

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US-08-757-653-139/c
; Sequence 139, Application US/08757653
; Patent No. 5843669
; GENERAL INFORMATION:
; APPLICANT: Kaiser, Michael W.
```

```
; APPLICANT: Lyamichev, Victor I.
; APPLICANT: Lyamichev, Natasha
; TITLE OF INVENTION: Cleavage Of Nucleic Acid Using
; TITLE OF INVENTION: Thermostable FEN-1 Endonucleases
; NUMBER OF SEQUENCES: 190
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll, LLP
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States Of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/757,653
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Ingolia, Diane E.
; REGISTRATION NUMBER: 40,027
; REFERENCE/DOCKET NUMBER: FORS-02565
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 139:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-08-757-653-139
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Query Match      74.9%; Score 469; DB 2; Length 620;
Best Local Similarity 85.3%; Pred. No. 4.7e-94;
Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;

Qy 1 TCCGTCCTCCGTCGTGGCGCGCATCAAGGAGTTCTTTCGGAACCAAGCCAGCTGTCGAGTTCA 60
Db |||||
Qy 61 TGGACCAAGAAACACCCGCTGTCGGGCTGACCCACACAGCTGCTGTCGGGCTGGGCC 120
Db |||||
Qy 553 TGGACCAAGAAACACCCGCTGTCGGGCTGACCTCAAGCGCGCTGTCGGGCTGGGCC 494
Db |||||
Qy 121 CCGGTGGTCTCACCCGTGACCGCGCGCGCTCGAGGTCGGGAGCTGCACCCCTCGCACT 180
Db |||||
Qy 493 CCGCGGTCTCTACGTGAGCTGCGCGGCTGGAGTCCGCGACGTGCACCCGTCGCACT 434
Db |||||
Qy 181 ACGCCCGCATGTGCCCGATCGAGACCCCGGAAGCCGAAACATCGGCTGATCGGCTGC 240
Db |||||
Qy 433 ACGCCCGCATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGCTGATCGGCTGC 374
Db |||||
Qy 241 TGTGGTGTACCGCGGGTCAACCGTTTCGGTTTCATCGACGCGCTTACCGGAGGTCT 300
Db |||||
Qy 373 TGTGGTGTACCGCGGGTCAACCGTTTCGGTTTCATCGAAACGCGCTACCGAGGTGG 314
Db |||||
Qy 301 CGGACGAGTTGTTCACCGACGACATCCACTACCTGACGCGCGCAAGAGGACCGCCACG 360
Db |||||
Qy 313 TCGACGCGGTGGTTAGCGACGAGATCGTGTACTGACCGCGCAAGAGGACCGCCACG 254
Db |||||
Qy 361 TGGTGGCGCAGGCCAACTCGCCCGTGGACGCCCAAGCGCGCTTACCGAGGAGAGATCC 420
Db |||||
Qy 253 TGGTGGCACAGGCCAAATTCGCGCATCGATCGGAGCGGTGCTGCTGAGCGCGCGGTGC 194
Db |||||
Qy 421 TGGTTCGCGCAAGGCGGAGGTGGAGTTCTGTCGCGGACCGAGGTGCACTACATGG 480
Db |||||
Qy 193 TGGTTCGCGCAAGGCGGAGGTGGAGTTCTGCTGAGGTGGACTACATGG 134
Db |||||
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US-08-520-946-136

Query Match 74.9%; Score 469; DB 4; Length 620;
Best Local Similarity 85.3%; Pred. No. 4.7e-94;
Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;

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QY 1 TCGTCCCGTCGTGGCGGCGATCAAGAGATTCTTCGGAACAGCCAGCTGTCGAGTTCA 60
DB 8 TCGCGCGGTGGTTCGCGCGATCAAGAGATTCTTCGGAACAGCCAGCTGAGCCAATTCA 67
QY 61 TGGACCAAGAACAAACCCCGCTGTCGGGCGCTGACCCACAAGCGTCGTCGTTCGGCGCTGGGCC 120
DB 68 TGGACCAAGAACAAACCCCGCTGTCGGGCTGACCTACAGCGCGGACTGTCGGCGCTGGGCC 127
QY 121 CCGGTGTCGTACCCGTGACCGCGCGCGCTGAGGTCGAGGTCGCGAGCTGACCCCTCGCACT 180
DB 128 CCGCGCGTCTGTACGTCAGCGTCGCGGCTGGAGGTCGCGAGCTGACCCCTCGCACT 187
QY 181 ACGCCCGCATGTGCCCGATCGAGACCCCGGAAGCCCGAACATCGGCTGATCGGCTCGC 240
DB 188 ACGCCCGATGTGCCCGATCGAAACCCCTGAGGGGCCCAACATCGGCTGATCGGCTCGC 247
QY 241 TGTGCGGTGACCGCGCGGTCAACCCCGTTCGCTTCATCGAGACGCTTACCGGAAGTCT 300
DB 248 TGTGCGGTGACCGCGCGGTCAACCCCGTTCGCTTCATCGAAACGCGCTACCGCAAGTGG 307
QY 301 CGGACGAGTTGTACCGAGACATCCACTACCTAGCGCGCGGAGAGAGACCGCCACG 360
DB 308 TCGACGCGGTGGTTAGCGAGAGATCGTGTACTGACCGCGGAGAGAGACCGCCACG 367
QY 361 TGGTGGCGAGGCAACTCGCCGTGGACGCCAAGCCGCTTCAACGAGGAGAATCC 420
DB 368 TGGTGGCACAGGCCAATTCCCGGATCGATCGGAGCGGTTCGTCGACCGCGCGTGC 427
QY 421 TGGTTCGCGCAAGGGCGGAGGTGGAGTTGCTGTCGGCGACCGAGTCCGACTACATGG 480
DB 428 TGGTTCGCGCAAGGGCGGAGGTGGAGTTGCTGTCGCGGACCGAGTCCGCTGAGTGG 487
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DB 488 ACGTCTCGCCCGCCAGATGGTGTGCTGCGGACCGCGATGATCCCGTTCCTGAGCACG 547
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DB 548 ACGACGCCAACCGTGCCTCATGGGTGCCAATCGACGCGCAGGCGGTTCGCGTGGTGC 607
QY 601 GTAGCGAGGTCC 613
DB 608 GTAGCGAGGCCCC 620
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RESULT 15

US-08-520-946-137
; Sequence 137, Application US/08520946
; Patent No. 6372424

GENERAL INFORMATION:

; APPLICANT: BROW, MARY ANN D.
; APPLICANT: LYAMICHEV, VICTOR I.
; APPLICANT: OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; TITLE OF INVENTION: PATHOGENS
; NUMBER OF SEQUENCES: 160
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104

COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

; CURRENT APPLICATION DATA: US/08/520,946
; FILING DATE:

CLASSIFICATION:

; ATTORNEY/AGENT INFORMATION:

; NAME: CARROLL, PETER G.

; REGISTRATION NUMBER: 32,837

; REFERENCE/DOCKET NUMBER: FORS-01756

TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 705-8410

; TELEFAX: (415) 397-8338

; INFORMATION FOR SEQ ID NO: 137:

SEQUENCE CHARACTERISTICS:

; LENGTH: 620 base pairs

; TYPE: nucleic acid

; STRANDEDNESS: double

; TOPOLOGY: linear

; MOLECULE TYPE: DNA (genomic)

; US-08-520-946-137

Query Match 74.9%; Score 469; DB 4; Length 620;

Best Local Similarity 85.3%; Pred. No. 4.7e-94;

Matches 523; Conservative 0; Mismatches 90; Indels 0; Gaps 0;

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DB 8 TCGCGCGGTGGTTCGCGCGATCAAGAGATTCTTCGGAACAGCCAGCTGAGCCAATTCA 67
QY 61 TGGACCAAGAACAAACCCCGCTGTCGGGCGCTGACCCACAAGCGTCGTCGTTCGGCGCTGGGCC 120
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QY 121 CCGGTGTCGTACCCGTGACCGCGCGCGCTGAGGTCGAGGTCGCGAGCTGACCCCTCGCACT 180
DB 128 CCGCGCGTCTGTACGTCAGCGTCGCGGCTGGAGGTCGCGAGCTGACCCCTCGCACT 187
QY 181 ACGCCCGCATGTGCCCGATCGAGACCCCGGAAGCCCGAACATCGGCTGATCGGCTCGC 240
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QY 301 CGGACGAGTTGTACCGAGACATCCACTACCTAGCGCGCGGAGAGAGACCGCCACG 360
DB 308 TCGACGCGGTGGTTAGCGAGAGATCGTGTACTGACCGCGGAGAGAGACCGCCACG 367
QY 361 TGGTGGCGAGGCAACTCGCCGTGGACGCCAAGCCGCTTCAACGAGGAGAATCC 420
DB 368 TGGTGGCACAGGCCAATTCCCGGATCGATCGGAGCGGTTCGTCGACCGCGCGTGC 427
QY 421 TGGTTCGCGCAAGGGCGGAGGTGGAGTTGCTGTCGGCGACCGAGTCCGACTACATGG 480
DB 428 TGGTTCGCGCAAGGGCGGAGGTGGAGTTGCTGTCGCGGACCGAGTCCGCTGAGTGG 487
QY 481 ATGTCGCGCGCCAGATGGTGTGCTGCGGACCGCGATGATCCCGTTCCTCGAGACG 540
DB 488 ACGTCTCGCCCGCCAGATGGTGTGCTGCGGACCGCGATGATCCCGTTCCTGAGCACG 547
QY 541 ACGACGCCAACCGTGCCTCATGGGTGCCAATCGACGCGCAGGCGGTTCGCGTGGTGC 600
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QY 601 GTAGCGAGGTCC 613
DB 608 GTAGCGAGGCCCC 620
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Search completed: August 19, 2004, 14:44:40

Job time : 71.999 secs

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: August 19, 2004, 14:25:11 ; Search time 407.972 Seconds
(without alignments)
8488.468 Million cell updates/sec

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Perfect score: 705
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Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 3228839 seqs, 245606551 residues

Total number of hits satisfying chosen parameters: 6457678

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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2: /cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq.*
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19: /cgn2_6/ptodata/1/pubpna/US60_PUBCOMB.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	705	100.0	705	9	US-09-285-306-1
2	705	100.0	705	9	US-09-285-306-1
3	697.4	98.9	3288	13	US-10-282-122A-26193
4	697.4	98.9	3519	9	US-09-712-363-30
5	697.4	98.9	3519	13	US-10-282-122A-28230
6	687	97.4	687	9	US-09-285-306-29
7	620.2	88.0	705	9	US-09-285-306-181
8	620	87.9	620	10	US-09-940-925A-135
9	620	87.9	620	10	US-09-940-925A-138
10	620	87.9	620	10	US-09-941-193A-135
11	620	87.9	620	10	US-09-941-193A-138
12	618.4	87.7	620	10	US-09-940-925A-136
13	618.4	87.7	620	10	US-09-940-925A-137
14	618.4	87.7	620	10	US-09-940-925A-139

C	15	618.4	87.7	620	10	US-09-940-925A-140	Sequence 140, App
	16	618.4	87.7	620	10	US-09-941-193A-136	Sequence 136, App
	17	618.4	87.7	620	10	US-09-941-193A-137	Sequence 137, App
	18	618.4	87.7	620	10	US-09-941-193A-139	Sequence 139, App
C	19	618.4	87.7	620	10	US-09-941-193A-140	Sequence 140, App
	20	613.8	87.1	705	9	US-09-285-306-87	Sequence 87, App
	21	613.8	87.1	705	9	US-09-285-306-88	Sequence 88, App
	22	613.8	87.1	705	9	US-09-285-306-89	Sequence 89, App
	23	613.8	87.1	705	9	US-09-285-306-90	Sequence 90, App
	24	613.8	87.1	705	9	US-09-285-306-91	Sequence 91, App
	25	613.8	87.1	705	9	US-09-285-306-92	Sequence 92, App
	26	613.8	87.1	705	9	US-09-285-306-96	Sequence 96, App
	27	612.2	86.8	705	9	US-09-285-306-84	Sequence 84, App
	28	612.2	86.8	705	9	US-09-285-306-86	Sequence 86, App
	29	612.2	86.8	705	9	US-09-285-306-93	Sequence 93, App
	30	612.2	86.8	705	9	US-09-285-306-94	Sequence 94, App
	31	612.2	86.8	705	9	US-09-285-306-95	Sequence 95, App
	32	610.6	86.6	705	9	US-09-285-306-3	Sequence 3, App
	33	610.6	86.6	705	9	US-09-285-306-4	Sequence 4, App
	34	610.6	86.6	705	9	US-09-285-306-5	Sequence 5, App
	35	610.6	86.6	705	9	US-09-285-306-6	Sequence 6, App
	36	610.6	86.6	705	9	US-09-285-306-7	Sequence 7, App
	37	610.6	86.6	705	9	US-09-285-306-8	Sequence 8, App
	38	610.6	86.6	705	9	US-09-285-306-9	Sequence 9, App
	39	610.6	86.6	705	9	US-09-285-306-12	Sequence 12, App
	40	610.6	86.6	705	9	US-09-285-306-13	Sequence 13, App
	41	610.6	86.6	705	9	US-09-285-306-14	Sequence 14, App
	42	610.6	86.6	705	9	US-09-285-306-16	Sequence 16, App
	43	610.6	86.6	705	9	US-09-285-306-24	Sequence 24, App
	44	610.6	86.6	705	9	US-09-285-306-85	Sequence 85, App
	45	609	86.4	705	9	US-09-285-306-17	Sequence 17, App

ALIGNMENTS

RESULT 1
US-09-285-306-1
; Sequence 1, Application US/09285306A
; Publication NO. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 1
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
US-09-285-306-1

Query Match	100.0%	Score	705	DB	9	Length	705
Best Local Similarity	100.0%	Pred. No.	4.9e-170	Indels	0	Gaps	0
Matches	705	Conservative	0	Mismatches	0		
QY	1	CCCAGGCGTGGAGCGCATCACCGCAGAGCGTTGATCAACATCCGCGCGGTGTCGCGG	60				
Db	1	CCCAGGCGTGGAGCGCATCACCGCAGAGCGTTGATCAACATCCGCGCGGTGTCGCGG	60				
QY	61	CGATCAAGGAGTTCTTCGGGACCGACCGCAGTGCAGCAATTCATGACCAACACCGCG	120				
Db	61	CGATCAAGGAGTTCTTCGGGACCGACCGCAGTGCAGCAATTCATGACCAACACCGCG	120				
QY	121	TGTCGGGTTTCCACCAACGCGCGCGTGTGCGCGTGGCGCGTGTGTACCGTG	180				
Db	121	TGTCGGGTTTCCACCAACGCGCGCGTGTGCGCGTGGCGCGTGTGTACCGTG	180				

Qy	181	AGCGTCGCGGGCTGAGGTTCGCACGCTGCCACCCGTCGCACCTACGCGCCGAGTGTGCCCGA	240
Db	181		
Qy	181	AGCGTCGCGGGCTTGAGGTTCGCGACGTCGACCCCGTCGCACCTACGCGCCGAGTGTGCCCGA	240
Db	181		
Qy	241	TGCAAAACCCCTTGAGGGGCCAACATCGGTCTGTATCGGCTCAGTGTGGTGTACGCGCGGG	300
Db	241		
Qy	301	TCAAACCCCTTGAGGGGCCAACATCGGTCTGTATCGGCTCAGTGTGGTGTACGCGCGGG	360
Db	301		
Qy	361	ACGAGATCGTGTACTGCTGACC CGCACGAGGAGGACCGCCACGCTGCTGGGCACAGGCCAATT	420
Db	361		
Qy	421	CGCCGATCGATGCGGAACCGGTTCGTCGAGCCGCGAGGAGGACCGCCACGCTGTTGCGCCCAAGGCGG	480
Db	421		
Qy	481	GCGAGGTGGAGTACGTGCGCCCTCGTCTGAGGTGGACTACATGACGCTCTGCGCCCGCCACA	540
Db	481		
Qy	541	TGGTGTTCGTTGGGCCACCGCATGATTCCCTTCTCGAGCACGACGACGCAACCGTGGCC	600
Db	541		
Qy	601	TCATGGGGGCAAAACATGACGCGCCAGGCGGTGCCCGCTGCTCGTAGCGAGGCCCGCTGG	660
Db	601		
Qy	661	TGGGCACCGGATGAGCTGCGCGGGGATCGACGCGCGCGACGT	705
Db	661		

RESULT 2

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US-09-285-306-28
; Sequence 28, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingers, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-018570US
; CURRENT APPLICATION NUMBER: US/09/285, 306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 28
; LENGTH: 705
; TYPE: DNA
; ORGANISM: Mycobacterium bovis
US-09-285-306-28
    
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Db	1	CCCAGGACGTGGAGGCGATCACACCGCAGACGTTGATCAACATCCCGCGCGGTGGTGC	60
Qy	61	CGATCAAGAGTTCCTTCGSCACAGCGCAGCTGAGCCAAATTCATGACACAGAACCAACCGC	120
Db	61	CGATCAAGAGTTCCTTCGSCACAGCGCAGCTGAGCCAAATTCATGACACAGAACCAACCGC	120
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; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/267,636
; PRIOR FILING DATE: 2001-02-09
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 78614
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 26193
; LENGTH: 3288
; TYPE: DNA
; ORGANISM: Mycobacterium bovis
US-10-282-122A-26193

Query Match      98.9%; Score 697.4; DB 13; Length 3288;
Best Local Similarity 99.9%; Pred. No. 4.1e-168;
Matches 698; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY      971 CCCAGACGTGTGAGGCGATCACACCGCAGACGTTGATCAACATCCGGCCGGTGGTCCCG 1030
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QY      61  CGATCAAGGAGTCTTCGGCACCGACGACGCTGAGCCAAATTCATGACCAAGCAACCCCG 120
Db      |||
QY      1031 CGATCAAGGAGTCTTCGGCACCGACGACGCTGAGCCAAATTCATGACCAAGCAACCCCG 1090
Db      |||
QY      121  TGTCCGGGTTGACCCACAAAGCCCGACTGTCCGGCGTGGGGCCCGCGTCTGTACAGTG 180
Db      |||
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Db      |||
QY      181  AGCGTCCGGGTTGAGGTCGCGAGTGCACCCGTCGCACTACGCGCGGATGTGCCGA 240
Db      |||
QY      1151 AGCGTCCGGGTTGAGGTCGCGAGTGCACCCGTCGCACTACGCGCGGATGTGCCGA 1210
Db      |||
QY      241  TCGAACCCTTGAGGGCCCAACATCGTCTATCGGTCGCTGCTGCTGAGTACGCGCGG 300
Db      |||
QY      1211 TCGAACCCTTGAGGGCCCAACATCGTCTATCGGTCGCTGCTGCTGAGTACGCGCGG 1270
Db      |||
QY      301  TCAACCCGTTCCGGTTTCGAAACGCGCTACCGAAGTGTGTCAGCGCGTGTAGCG 360
Db      |||
QY      1271 TCAACCCGTTCCGGTTTCGAAACGCGCTACCGAAGTGTGTCAGCGCGTGTAGCG 1330
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QY      361  ACCGATCGTGTACCTGACCGCGGACGAGGAGGACCGCCACGTCGTGTGGCACAGGCCAATT 420
Db      |||
QY      1331 ACCGATCGTGTACCTGACCGCGGACGAGGAGGACCGCCACGTCGTGTGGCACAGGCCAATT 1390
Db      |||
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QY      481  GCGAGGTGGAGTACGTGCCCCCTGCTGAGGTGGAATACATGACGCTCGCCCCGCCAGA 540
Db      |||
QY      1451 GCGAGGTGGAGTACGTGCCCCCTGCTGAGGTGGAATACATGACGCTCGCCCCGCCAGA 1510
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QY      541  TGGTGTCCGTGGCCACCGCGATGATTCCTTCTGAGGACGACGACGACGACGACGACGACG 600
Db      |||
QY      1511 TGGTGTCCGTGGCCACCGCGATGATTCCTTCTGAGGACGACGACGACGACGACGACG 1570
Db      |||
QY      601  TCATGGGGGCAAAACATGACGCGCCAGCGGTCGCGCTGCTGCTGCTGCTGCTGCTGCTGCTG 660
Db      |||
QY      1571 TCATGGGGGCAAAACATGACGCGCCAGCGGTCGCGCTGCTGCTGCTGCTGCTGCTGCTG 1630
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QY      661  TGGGCACCGGATGAGTGTGCGCGCGGCGGATCGACGCGG 699
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RESULT 4

US-09-712-363-30

; Sequence 30, Application US/09712363

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; Patent No. US20020164588A1
; GENERAL INFORMATION:
; APPLICANT: Eisenberg, David
; APPLICANT: Rotstein, Sergio H.
; APPLICANT: Marcotte, Edward M.
; TITLE OF INVENTION: DETERMINING THE FUNCTIONS AND
; TITLE OF INVENTION: INTERACTIONS OF PROTEINS BY COMPARATIVE ANALYSIS
; FILE REFERENCE: 07419-032001
; CURRENT APPLICATION NUMBER: US/09/712,363
; CURRENT FILING DATE: 2000-11-13
; PRIOR APPLICATION NUMBER: PCT/US00/02246
; PRIOR FILING DATE: 2000-01-28
; PRIOR APPLICATION NUMBER: 60/179,531
; PRIOR FILING DATE: 2000-02-01
; PRIOR APPLICATION NUMBER: 60/117,844
; PRIOR FILING DATE: 1999-01-29
; PRIOR APPLICATION NUMBER: 60/118,206,
; PRIOR FILING DATE: 1999-02-01
; PRIOR APPLICATION NUMBER: 60/126,593
; PRIOR FILING DATE: 1999-03-26
; PRIOR APPLICATION NUMBER: 60/134,093
; PRIOR FILING DATE: 1999-05-14
; PRIOR APPLICATION NUMBER: 60/134,092
; PRIOR FILING DATE: 1999-05-14
; PRIOR APPLICATION NUMBER: 60/165,124
; PRIOR FILING DATE: 1999-11-12
; PRIOR APPLICATION NUMBER: 60/165,086
; PRIOR FILING DATE: 1999-11-12
; NUMBER OF SEQ ID NOS: 292
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 30
; LENGTH: 3519
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
US-09-712-363-30
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Query Match 98.9%; Score 697.4; DB 9; Length 3519;
Best Local Similarity 99.9%; Pred. No. 4.1e-168;
Matches 698; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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QY      61  CGATCAAGGAGTCTTCGGCACCGACGACGCTGAGCCAAATTCATGACCAAGCAACCCCG 120
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QY      181  AGCGTCCGGGTTGAGGTCGCGAGTGCACCGCGTCCGCTCCACTACCGCGGATGTCCCGA 240
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QY      1379 AGCGTCCGGGTTGAGGTCGCGAGTGCACCGCGTCCGCTCCACTACCGCGGATGTCCCGA 1438
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QY      241  TCGAACCCTTGAGGGCCCAACATCGGTCGCTGATCGGTCGCTGCTGCTGCTGCTGCTGCTG 300
Db      |||
QY      1439 TCGAACCCTTGAGGGCCCAACATCGGTCGCTGATCGGTCGCTGCTGCTGCTGCTGCTGCTG 1498
Db      |||
QY      301  TCAACCCGTTCCGGTTTCATCGAAACGCGGTACCGCAAGGTGTGTCAGCGCGTGTAGCG 360
Db      |||
QY      1499 TCAACCCGTTCCGGTTTCATCGAAACGCGGTACCGCAAGGTGTGTCAGCGCGTGTAGCG 1558
Db      |||
QY      361  ACAGATCGTGTACTGACCGCCGACGAGGAGGACCGCACGTCGTCGTCGTCGTCGTCGTCGTCG 420
Db      |||
QY      1559 ACAGATCGTGTACTGACCGCCGACGAGGAGGACCGCACGTCGTCGTCGTCGTCGTCGTCG 1618
Db      |||
QY      421  CGCGATCGATCGGACGCGTCTGTCGTCGAGCCGCGGTGCTGTCGTCGTCGTCGTCGTCGTCGTCG 480
Db      |||
QY      1619 CGCGATCGATCGGACGCGTCTGTCGTCGAGCCGCGGTGCTGTCGTCGTCGTCGTCGTCGTCGTCG 1678
Db      |||
QY      481  CGAGGTGGAGTACGTGCCCTCTGCTGAGGTGGACTACATGGAAGCTCTCTGCCGCCGCCAGA 540
Db      |||
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Accession	Sequence	Length
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541	TGTTGTTCGTGGCCACCGCGATGATTCCTTCTTGGAGCAGCAGCGCAACCGTGCCCC	600
1739	TGTTGTTCGTGGCCACCGCGATGATTCCTTCTTGGAGCAGCAGCGCAACCGTGCCCC	1798
601	TCATGGGGCAACATCAGCGCCAGCGTGGCGTGGTCCGTAGCAGAGCCCCCGCTGG	660
1799	TCATGGGGCAACATCAGCGCCAGCGGTGGCGTGGTCCGTAGCAGAGCCCCCGCTGG	1858
661	TGGGCACCGGATGGAGCTCGCGCGCGCATCGACGCGG	699
1859	TGGGCACCGGATGGAGCTCGCGCGCGCATCGACGCGG	1897

RESULT 5

```

RESULT 5
US-10-282-122A-28230
/ Sequence 28230, Application US/10282122A
/ Publication No. US20040029129A1
/ GENERAL INFORMATION:
/ APPLICANT: Wang, Liangsu
/ APPLICANT: Zamudio, Carlos
/ APPLICANT: Malone, Cheryl
/ APPLICANT: Haselbeck, Robert
/ APPLICANT: Ohlsen, Karl
/ APPLICANT: Zyskind, Judith
/ APPLICANT: Wall, Daniel
/ APPLICANT: Trawick, John
/ APPLICANT: Carr, Grant
/ APPLICANT: Yamamoto, Robert
/ APPLICANT: Forsyth, R.
/ APPLICANT: Xu, H.
/ TITLE OF INVENTION: Identification of Essential Genes in Microorganisms
/ FILE REFERENCE: ELITRA.034A
/ CURRENT APPLICATION NUMBER: US/10/282,122A
/ CURRENT FILING DATE: 2003-02-20
/ PRIOR APPLICATION NUMBER: 60/191,078
/ PRIOR FILING DATE: 2000-03-21
/ PRIOR APPLICATION NUMBER: 60/206,848
/ PRIOR FILING DATE: 2000-05-23
/ PRIOR APPLICATION NUMBER: 60/207,727
/ PRIOR FILING DATE: 2000-05-26
/ PRIOR APPLICATION NUMBER: 60/230,335
/ PRIOR FILING DATE: 2000-09-06
/ PRIOR APPLICATION NUMBER: 60/230,347
/ PRIOR FILING DATE: 2000-09-09
/ PRIOR APPLICATION NUMBER: 60/242,578
/ PRIOR FILING DATE: 2000-10-23
/ PRIOR APPLICATION NUMBER: 60/253,625
/ PRIOR FILING DATE: 2000-11-27
/ PRIOR APPLICATION NUMBER: 60/257,931
/ PRIOR FILING DATE: 2000-12-22
/ PRIOR APPLICATION NUMBER: 60/267,636
/ PRIOR FILING DATE: 2001-02-09
/ PRIOR APPLICATION NUMBER: 60/269,308
/ PRIOR FILING DATE: 2001-02-16
/ Remaining Prior Application data removed - See File Wrapper or PALM.
/ NUMBER OF SEQ ID NOS: 78614
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO 28230
/ LENGTH: 3519
/ TYPE: DNA
/ ORGANISM: Mycobacterium tuberculosis
US-10-282-122A-28230

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	Query Match	98.9%	Score 697.4;	DB 13;	Length 3519;
Best Local Similarity	99.9%				
Matches	698;	Conservative	0;	Mismatches 168;	
				Indels	0; Gaps 0;
Qy	1	CCACGAGCGTGGAGCGGATCACCGCAGACGGTTGATCAACATCCGCGCCGGTGTCGCCG	60		
Qb	1199	CCACGAGCGTGGAGCGGATCACCGCAGACGGTTGATCAACATCCGCGCCGGTGTCGCCG	1358		

QY	61	CGATCAAGGAGTTCTTC	TGGGACA	CGACGAGCTGAGCCAA	TTCA	TGACCGA	CAACCCGC	120
Db	1259	CGATCAAGGAGTTCTTC	TGGCACCAGCAGCTGAGCCAA	TTCA	TGACCGA	CAACCCGC	1318	
QY	121	TGTGCGGGTTGACCC	CAACAGCGCGAGCTGCGCGCT	TGGGGCCGCGGCTCTG	TCA	CAGTG	180	
Db	1319	TGTGCGGGTTGACCC	CAAGCGCGACTGTGCGCGCT	TGGGGCCGCGGCTCTG	TCA	CAGTG	1378	
QY	181	AGCGTCCGGGCTG	GAGTCCGACGTGC	ACCCGTGCACTACGCGCGATGT	GC	CCGA	240	
Db	1379	AGCGTCCGGGCTG	GAGTCCGCGAGCTGCACCCGTCGCACTACGCGCGATGT	GC	CCGA	1438		
QY	241	TCGAAACCCCTGAG	GGGCCCAACATCGGTCTGATCGCT	CGCTCGGTGTACGCGGG	300			
Db	1439	TCGAAACCCCTGAG	GGGCCCAACATCGGTCTGATCGCT	CGCTCGGTGTACGCGGG	1498			
QY	301	TCAACCCGTTCCG	GGTTTCATCGAAACCCGTACCGCAAGGTGT	CGACGGCGTGTTAGCG	360			
Db	1499	TCAACCCGTTCCG	GGTTTCATCGAAACCCGTACCGCAAGGTGTGT	CGACGGCGTGTTAGCG	1558			
QY	361	ACGAGATCGGTG	TACCTGACCGCGACGAGGAGACCGCCACGTTGGT	TGGCACAGGCCAATT	420			
Db	1559	ACGAGATCGGTG	TACCTGACCGCGACGAGGAGACCGCCACGTTGGT	TGGCACAGGCCAATT	1618			
QY	421	CGCGCATCATCGG	ACGGTCGTTTCTCGTCAGCGCGCGCTGCTGCTCGCGCAAGCGG	480				
Db	1619	CGCGCATCATCGG	ACGGTCGTTTCTCGTCAGCGCGCGCTGCTGCTCGCGCAAGCGG	1678				
QY	481	CGGAGGTGGAGT	ACGTGCCCTCTGAGTGGACTACATGGACGTCTG	CCCGCCGACGA	540			
Db	1679	CGGAGGTGGAGT	ACGTGTCCTCTGAGTGGACTACATGGACGTCTG	CCCGCCGACGA	1738			
QY	541	TGTTCTCGTTGG	CCACCGCGATGATCCCTTCTGTGACGACGACGACCGCAACCGTGCC	600				
Db	1739	TGTTCTCGTTGG	CCACCGCGATGATCCCTTCTGTGACGACGACGACCGCAACCGTGCC	1798				
QY	601	TCATGGGGGCAAC	ATCAGCGCCAGCGGTTGCCGTGTGCTCCGTAGCGAGGCCCGCTGG	660				
Db	1799	TCATGGGGGCAAC	ATCAGCGCCAGCGGTTGCCGTGTGCTCCGTAGCGAGGCCCGCTGG	1858				
QY	661	TGGGCACCGGGAT	TGAGCTCGGCGCGCGATGACGCGG	699				
Db	1859	TGGGCACCGGGAT	TGAGCTCGGCGCGCGATGACGCGG	1897				

RESULT 6

```

RESULT 6
US-09-285-306-29
; Sequence 29, Application US/09285306A
; Publication No. US20020187467A1
; GENERAL INFORMATION:
; APPLICANT: Gingeras, Thomas
; APPLICANT: Drenkow, Jorg
; APPLICANT: Affymetrix, Inc.
; TITLE OF INVENTION: Mycobacterial rpoB Sequences
; FILE REFERENCE: 018547-0185700S
; CURRENT APPLICATION NUMBER: US/09/285,306A
; CURRENT FILING DATE: 1999-04-02
; EARLIER APPLICATION NUMBER: US 60/080,616
; EARLIER FILING DATE: 1998-04-03
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 29
; LENGTH: 687
; TYPE: DNA
; ORGANISM: Mycobacterium bovis
US-09-285-306-29

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Query Match	97.4%	Score 687;	DB 9;	Length 687;
Best Local Similarity	100.0%;	Pred. No. 1.9e-165;		
Matches 687;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Qv	11	GGAGCGCATCACCGGACGAGCTTGATCAACATCCGGCCGGTGTCGCCCGCGCATCAAGGA	70	


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;
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/940,925A
; FILING DATE: 10-Jun-2002
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 135:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 135:
US-09-940-925A-135

Query Match      87.9%; Score 620; DB 10; Length 620;
Best Local Similarity 100.0%; Pred. No. 2.1e-148;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGCGCGGTGTCGCGCGATCAAGGAGTTCTTCGGCACACGACCTGAGC 95
Db 1 ATCAACATCCGCGCGGTGTCGCGCGATCAAGGAGTTCTTCGGCACACGACCTGAGC 60

Qy 96 CAATTTCATGACACAGAAACAACCCGCTGTCGGGGTTGACCCACAGCGCCGACTGCGGC 155
Db 61 CAATTTCATGACACAGAAACAACCCGCTGTCGGGGTTGACCCACAGCGCCGACTGCGGC 120

Qy 156 CTGGGGCCCGCGCTGTCACGTGAGGTCCGGGCTGGAGTCCGGAGCTGCACCCG 215
Db 121 CTGGGGCCCGCGCTGTCACGTGAGGTCCGGGCTGGAGTCCGGAGCTGCACCCG 180

Qy 216 TCGCACTACGCGCGATGTGCCCATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGATGTGCCCATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

Qy 276 GGCTCGCTGTCGGGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACCCGCTACCGC 335
Db 241 GGCTCGCTGTCGGGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACCCGCTACCGC 300

Qy 336 AAGTGTGTCAGCGCGTGTAGCGACGAGATCGTGTACCTGACCGCGCGACGAGGAGGAC 395
Db 301 AAGTGTGTCAGCGCGTGTAGCGACGAGATCGTGTACCTGACCGCGCGACGAGGAGGAC 360

Qy 396 CGCCACGTGTGGCACAGGCGCAATTCCGCCGATCGATCGGACGCTTCGTCGAGCGC 455
Db 361 CGCCACGTGTGGCACAGGCGCAATTCCGCCGATCGATCGGACGCTTCGTCGAGCGC 420

Qy 456 CGCTGTGTGTCGCGCGGAGCGGCGAGGTGAGTACGTCGCTCTGTCGAGGTGAC 515
Db 421 CGCTGTGTGTCGCGCGGAGCGGCGAGGTGAGTACGTCGCTCTGTCGAGGTGAC 480

Qy 516 TACATGACGTCTCGCGCGCGCAGATGCTGTCGCTGGCCACCGGATGATTCCTTCTG 575
Db 481 TACATGACGTCTCGCGCGCGCAGATGCTGTCGCTGGCCACCGGATGATTCCTTCTG 540

Qy 576 GAGCAGCAGCAGCGCAACCGCTGCCTCATGGGGGCAAAACATGACGCGCGAGCGGTGCC 635
Db 541 GAGCAGCAGCAGCGCAACCGCTGCCTCATGGGGGCAAAACATGACGCGCGAGCGGTGCC 600

Qy 636 CTGTCTCGTAGCGAGGCCCC 655
Db 601 CTGTCTCGTAGCGAGGCCCC 620
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RESULT 9

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US-09-940-925A-138/c
; Sequence 138, Application US/09940925A
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; Publication No. US20030054338A1
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; LYAMICHEV, VICTOR I.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/940,925A
; FILING DATE: 10-Jun-2002
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 138:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 138:
US-09-940-925A-138
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Query Match      87.9%; Score 620; DB 10; Length 620;
Best Local Similarity 100.0%; Pred. No. 2.1e-148;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGCGCGGTGTCGCGCGATCAAGGAGTTCTTCGGCACACGACCTGAGC 95
Db 620 ATCAACATCCGCGCGGTGTCGCGCGATCAAGGAGTTCTTCGGCACACGACCTGAGC 561

Qy 96 CAATTTCATGACACAGAAACAACCCGCTGTCGGGGTTGACCCACAGCGCCGACTGCGGC 155
Db 560 CAATTTCATGACACAGAAACAACCCGCTGTCGGGGTTGACCCACAGCGCCGACTGCGGC 501

Qy 156 CTGGGGCCCGCGCTGTCACGTGAGGTCCGGGCTGGAGTCCGGAGCTGCACCCG 215
Db 500 CTGGGGCCCGCGCTGTCACGTGAGGTCCGGGCTGGAGTCCGGAGCTGCACCCG 441

Qy 216 TCGCACTACGCGCGATGTGCCCATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275
Db 440 TCGCACTACGCGCGATGTGCCCATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381

Qy 276 GGCTCGCTGTCGGGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACCCGCTACCGC 335
Db 380 GGCTCGCTGTCGGGTACGCGCGGTCAACCCGTTTCGGGTTTCATCGAAACCCGCTACCGC 321

Qy 336 AAGTGTGTCAGCGCGTGTAGCGACGAGATCGTGTACCTGACCGCGCGACGAGGAGGAC 395
Db 320 AAGTGTGTCAGCGCGTGTAGCGACGAGATCGTGTACCTGACCGCGCGACGAGGAGGAC 261

Qy 396 CGCCACGTGTGGCACAGGCGCAATTCCGCCGATCGATCGGACGCTTCGTCGAGCGC 455
Db 260 CGCCACGTGTGGCACAGGCGCAATTCCGCCGATCGATCGGACGCTTCGTCGAGCGC 201
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QY 456 CGCGTCTGGTCCGCGAAGCGCGGAGGTGAGTACGTGCGCTCTGAGGTGGAC 515
 Db 200 CGCGTCTGGTCCGCGAAGCGCGGAGGTGAGTACGTGCGCTCTGAGGTGGAC 141
 QY 516 TACATGAGCTCTGCGCCCGCCAGATGAGTCTGGTGGCCACCGCGATGATTCCTTCCTG 575
 Db 140 TACATGAGCTCTGCGCCCGCCAGATGAGTCTGGTGGCCACCGCGATGATTCCTTCCTG 81
 QY 576 GAGCAGGAGCGCCAAACCGTGCCTCATGGGGGAAACATGACAGCGCCAGCGGTGGCG 635
 Db 80 GAGCAGGAGCGCCAAACCGTGCCTCATGGGGGAAACATGACAGCGCCAGCGGTGGCG 21
 QY 636 CTGGTCCGTAGCGAGGCC 655
 Db 20 CTGGTCCGTAGCGAGGCC 1

RESULT 10
 US-09-941-193A-135
 ; Sequence 135, Application US/09941193A
 ; Publication No. US20030108873A1
 ; GENERAL INFORMATION:
 ; APPLICANT: BROW, MARY ANN D.
 ; OLIVE, DAVID M.
 ; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
 ; NUMBER OF SEQUENCES: 165
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: MEDLEN & CARROLL
 ; STREET: 220 MONTGOMERY STREET, SUITE 2200
 ; CITY: SAN FRANCISCO
 ; STATE: CALIFORNIA
 ; COUNTRY: UNITED STATES OF AMERICA
 ; ZIP: 94104

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patent In Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/941,193A
 FILING DATE: 28-Aug-2001
 CLASSIFICATION: <Unknown>
 ATTORNEY/AGENT INFORMATION:
 NAME: CARROLL, PETER G.
 REGISTRATION NUMBER: 32,837
 REFERENCE/DOCKET NUMBER: FORS-01756
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 705-8410
 TELEFAX: (415) 397-8338
 INFORMATION FOR SEQ ID NO: 135:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 620 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: double
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 SEQUENCE DESCRIPTION: SEQ ID NO: 135:
 US-09-941-193A-135

Query Match 87.9%; Score 620; DB 10; Length 620;
 Best Local Similarity 100.0%; Pred. No. 2.1e-148;
 Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 36 ATCAATCCGCGCGGTGGTCCGCGATCAAGAGTCTTCGGCACCGACGAGCTGAGC 95
 Db 1 ATCAATCCGCGCGGTGGTCCGCGATCAAGAGTCTTCGGCACCGACGAGCTGAGC 60
 QY 96 CAATTATGAGCAGAAACCCGCTGTGGGGTTGACCCCAAGCGCGGACTGTGGCG 155
 Db 61 CAATTATGAGCAGAAACCCGCTGTGGGGTTGACCCCAAGCGCGGACTGTGGCG 120

QY 156 CTGGGCGCGCGGTCTGTACGTGAGCGTGC CGGCGTGGAGGTCCGCGACGTGCACCCG 215
 Db 121 CTGGGCGCGCGGTCTGTACGTGAGCGTGC CGGCGTGGAGGTCCGCGACGTGCACCCG 180
 QY 216 TCGCACTACGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275
 Db 181 TCGCACTACGCGCGGATGTCGCCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240
 QY 276 GGTCTGCTCGGTGTACGCGCGGGTCAAACCCGTTCCGGTTTCATCGAAACCGCGTACCCG 335
 Db 241 GGTCTGCTCGGTGTACGCGCGGGTCAAACCCGTTCCGGTTTCATCGAAACCGCGTACCCG 300
 QY 336 AAGTGGTTCGACGGCGTGTAGCGACGAGATCGTACTGACCCCGACGAGGAGAC 395
 Db 301 AAGTGGTTCGACGGCGTGTGTAGCGACGAGATCGTACTGACCCCGACGAGGAGAC 360
 QY 396 CGCCACGTGGTGGCACAGGCCAAATTCGCCGATCGATGCGGACGGTTCGTCGAGCCG 455
 Db 361 CGCCACGTGGTGGCACAGGCCAAATTCGCCGATCGATGCGGACGGTTCGTCGAGCCG 420
 QY 456 CGCGTCTGGTCCGCGCGCAAGCGCGGCGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGAC 515
 Db 421 CGCGTCTGGTCCGCGCGCAAGCGCGGCGAGGTGGAGTACGTGCCCTCGTCTGAGGTGGAC 480
 QY 516 TACATGGAGTCTCGCGCGCGCAGATGGTGTGGTGGCCACCGCGATGATTCCTTCCTG 575
 Db 481 TACATGGAGTCTCGCGCGCGCAGATGGTGTGGTGGCCACCGCGATGATTCCTTCCTG 540
 QY 576 GAGCAGCAGCGCCAAACCGTGCCTCATGGGGGAAACATGACGCGCGAGCGGTGGCG 635
 Db 541 GAGCAGCAGCGCCAAACCGTGCCTCATGGGGGAAACATGACGCGCGAGCGGTGGCG 600
 QY 636 CTGGTCCGTAGCGAGGCC 655
 Db 601 CTGGTCCGTAGCGAGGCC 620

RESULT 11
 US-09-941-193A-138/c
 ; Sequence 138, Application US/09941193A
 ; Publication No. US20030108873A1
 ; GENERAL INFORMATION:
 ; APPLICANT: BROW, MARY ANN D.
 ; OLIVE, DAVID M.
 ; LYAMICHEV, VICTOR I.
 ; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
 ; PATHOGENS
 ; NUMBER OF SEQUENCES: 165
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: MEDLEN & CARROLL
 ; STREET: 220 MONTGOMERY STREET, SUITE 2200
 ; CITY: SAN FRANCISCO
 ; STATE: CALIFORNIA
 ; COUNTRY: UNITED STATES OF AMERICA
 ; ZIP: 94104
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.30
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/941,193A
 ; FILING DATE: 28-Aug-2001
 ; CLASSIFICATION: <Unknown>
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: CARROLL, PETER G.
 ; REGISTRATION NUMBER: 32,837
 ; REFERENCE/DOCKET NUMBER: FORS-01756
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 705-8410
 ; TELEFAX: (415) 397-8338
 ; INFORMATION FOR SEQ ID NO: 138:
 ; SEQUENCE CHARACTERISTICS:

```

; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 138:
US-09-941-193A-138

Query Match
Best Local Similarity 100.0%; Score 620; DB 10; Length 620;
Matches 620; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGGCGGTGTCGCGCGATCAAGAGATCTTCGGCACAGCCAGCTGAGC 95
Db 620 ATCAACATCCGGCGGTGTCGCGCGATCAAGAGATCTTCGGCACAGCCAGCTGAGC 561

Qy 96 CAATTTCATGACACAGAACACCCGCTCTCGGGGTGACCCACAGCCCGACTGCGCG 155
Db 560 CAATTTCATGACACAGAACACCCGCTCTCGGGGTGACCCACAGCCCGACTGCGCG 501

Qy 156 CTGGGGCCCGCGGTCTGTACGTGAGCGTCCGGGCTGAGAGTCCGCGAGTGCACCG 215
Db 500 CTGGGGCCCGCGGTCTGTACGTGAGCGTCCGGGCTGAGAGTCCGCGAGTGCACCG 441

Qy 216 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275
Db 440 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 381

Qy 276 GGCTCGCTGTCGGTGTACGCGCGGTCAACCCGTTCCGGTTTCATCGAAACGCCGTACCGC 335
Db 380 GGCTCGCTGTCGGTGTACGCGCGGTCAACCCGTTCCGGTTTCATCGAAACGCCGTACCGC 321

Qy 336 AAGTGTGTACGCGCGTGTAGCGAGAGATCGTGTACCTGACCGCGCGAGGAGGAC 395
Db 320 AAGTGTGTACGCGCGTGTAGCGAGAGATCGTGTACCTGACCGCGCGAGGAGGAC 261

Qy 396 CGCCACGTGTGGCACAGGCCAATTCGCCGATCATGCGGAGTTCGCTTCGTGAGCGC 455
Db 260 CGCCACGTGTGGCACAGGCCAATTCGCCGATCATGCGGAGTTCGCTTCGTGAGCGC 201

Qy 456 CGCTGTGTGTCGCCCGCAAGCGCGGCGAGGTGAGTACGTGCCCTCGTCTGAGGTGAC 515
Db 200 CGCTGTGTGTCGCCCGCAAGCGCGGCGAGGTGAGTACGTGCCCTCGTCTGAGGTGAC 141

Qy 516 TACATGACGTCTGCGCCCGCGAGATGTTGCTGCGTGGCCACCGAGATTCCTTCTG 575
Db 140 TACATGACGTCTGCGCCCGCGAGATGTTGCTGCGTGGCCACCGAGATTCCTTCTG 81

Qy 576 GAGCAGCAGCAGCCAAACCGTCCCTCATGGGGGCAAAACATGACGCGCGAGCGGTGCG 635
Db 80 GAGCAGCAGCAGCCAAACCGTCCCTCATGGGGGCAAAACATGACGCGCGAGCGGTGCG 21

Qy 636 CTGTCCTGTAGCGAGGCCCC 655
Db 20 CTGTCCTGTAGCGAGGCCCC 1

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RESULT 12

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US-09-940-925A-136
; Sequence 136, Application US/09940925A
; Publication No. US20030054338A1
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; LYAMICHEV, VICTOR I.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA

```

```

; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/940,925A
; FILING DATE: 10-Jun-2002
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 136:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 136:
US-09-940-925A-136

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Query Match      87.7%; Score 618.4; DB 10; Length 620;
Best Local Similarity 99.8%; Pred. No. 5.4e-148;
Matches 619; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 36 ATCAACATCCGGCGGTGTCGCGCGATCAAGAGATCTTCGGCACAGCCAGCTGAGC 95
Db 1 ATCAACATCCGGCGGTGTCGCGCGATCAAGAGATCTTCGGCACAGCCAGCTGAGC 60

Qy 96 CAATTTCATGACACAGAACACCCGCTCTCGGGGTGACCCACAGCCCGACTGCGCG 155
Db 61 CAATTTCATGACACAGAACACCCGCTCTCGGGGTGACCTACAGCCCGACTGCGCG 120

Qy 156 CTGGGGCCCGCGGTCTGTACGTGAGCGTCCGGGCTGAGAGTCCGCGAGTGCACCG 215
Db 121 CTGGGGCCCGCGGTCTGTACGTGAGCGTCCGGGCTGAGAGTCCGCGAGTGCACCG 180

Qy 216 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 275
Db 181 TCGCACTACGCGCGGATGTCGCGATCGAAACCCCTGAGGGGCCCAACATCGGTCTGATC 240

Qy 276 GGCTCGCTGTCGGTGTACGCGCGGTCAACCCGTTCCGGTTTCATCGAAACGCCGTACCGC 335
Db 241 GGCTCGCTGTCGGTGTACGCGCGGTCAACCCGTTCCGGTTTCATCGAAACGCCGTACCGC 300

Qy 336 AAGTGTGTACGCGCGTGTAGCGAGAGATCGTGTACCTGACCGCGCGAGGAGGAC 395
Db 301 AAGTGTGTACGCGCGTGTAGCGAGAGATCGTGTACCTGACCGCGCGAGGAGGAC 360

Qy 396 CGCCACGTGTGGCACAGGCCAATTCGCCGATCATGCGGAGTTCGCTTCGTGAGCGC 455
Db 361 CGCCACGTGTGGCACAGGCCAATTCGCCGATCATGCGGAGTTCGCTTCGTGAGCGC 420

Qy 456 CGCTGTGTGTCGCCCGCAAGCGCGGCGAGGTGAGTACGTGCCCTCGTCTGAGGTGAC 515
Db 421 CGCTGTGTGTCGCCCGCAAGCGCGGCGAGGTGAGTACGTGCCCTCGTCTGAGGTGAC 480

Qy 516 TACATGACGTCTGCGCCCGCGAGATGTTGCTGCGTGGCCACCGAGATTCCTTCTG 575
Db 481 TACATGACGTCTGCGCCCGCGAGATGTTGCTGCGTGGCCACCGAGATTCCTTCTG 540

Qy 576 GAGCAGCAGCAGCCAAACCGTCCCTCATGGGGGCAAAACATGACGCGCGAGCGGTGCG 635
Db 541 GAGCAGCAGCAGCCAAACCGTCCCTCATGGGGGCAAAACATGACGCGCGAGCGGTGCG 600

Qy 636 CTGTCCTGTAGCGAGGCCCC 655

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Db 601 CTGGTCGTAGCGAGGCCCC 620
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RESULT 13
US-09-940-925A-137
; Sequence 137, Application US/09940925A
; Publication No. US20030054338A1
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; LYAMICHEV, VICTOR I.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA: US/09/940,925A
; FILING DATE: 10-Jun-2002
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 137:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 137:
US-09-940-925A-137
Query Match 87.7%; Score 618.4; DB 10; Length 620;
Best Local Similarity 99.8%; Pred. No. 5.4e-148;
Matches 619; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 36 ATCAATCCGGCGGTGTCGCCGATCAAGAGTTCCTCGGCACCGCAGCTGAGC 95
Db 1 ATCAATCCGGCGGTGTCGCCGATCAAGAGTTCCTCGGCACCGCAGCTGAGC 60
QY 96 CAATTATGACAGCAACAACCCGCTGTCGGGTGACCCACAGCGGCTGTCGGG 155
Db 61 CAATTATGACAGCAACAACCCGCTGTCGGGTGACCCACAGCGGCTGTCGGG 120
QY 156 CTGGGCGCGGGTCTGTCACTGAGGTGTCGGGTGAGGTGCGGAGTGCACCG 215
Db 121 CTGGGCGCGGGTCTGTCACTGAGGTGTCGGGTGAGGTGCGGAGTGCACCG 180
QY 216 TCGACTAGCGCGGATGTCGGGTGAAACCCCTGAGGGGCCCAACATCGTCTGATC 275
Db 181 TCGACTAGCGCGGATGTCGGGTGAAACCCCTGAGGGGCCCAACATCGTCTGATC 240
QY 276 GGCTCGCTGTCGTAGCGGGGTCAACCGTTTCGGGTTCATCGAACCGCTACCGC 335
Db 241 GGCTCGCTGTCGTAGCGGGGTCAACCGTTTCGGGTTCATCGAACCGCTACCGC 300
QY 336 AAGTGTGTCGAGCGGTGTTAGCGACGAGATCGTGTACCTGTGACCGCGCAGGAGGAC 395
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Db 301 AAGTGTGTCGACGCGGTGTTAGCGAGAGATCGTGTACCTGACCGCGCAGGAGGAC 360
QY 396 CGCACGTCGTGGCACAGGCCAATTCCCGATCGATCGGACGGTTCGTTCTGAGCCG 455
Db 361 CGCACGTCGTGGCACAGGCCAATTCCCGATCGATCGGACGGTTCGTTCTGAGCCG 420
QY 456 CGCGTCTGTCGCCCGCCAGAGCGGGCGAGGTGAGTACGTGCGCTCTGAGGTGAC 515
Db 421 CGCGTCTGTCGCCCGCCAGAGCGGGCGAGGTGAGTACGTGCGCTCTGAGGTGAC 480
QY 516 TACATGAGCTCTCGCCCGCCAGATGTCGTGTCGTCACCGGATGATCCCTTCTG 575
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QY 576 GAGCAGCAGCAGCCCAACCGTGCCTCATGGGGGCAAAACATGAGCCAGCGGTCGCG 635
Db 541 GAGCAGCAGCAGCCCAACCGTGCCTCATGGGGGCAAAACATGAGCCAGCGGTCGCG 600
QY 636 CTGGTCCGTAGGAGGCCCC 655
Db 601 CTGGTCCGTAGGAGGCCCC 620
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RESULT 14
US-09-940-925A-139/c
; Sequence 139, Application US/09940925A
; Publication No. US20030054338A1
; GENERAL INFORMATION:
; APPLICANT: BROW, MARY ANN D.
; LYAMICHEV, VICTOR I.
; OLIVE, DAVID M.
; TITLE OF INVENTION: RAPID DETECTION AND IDENTIFICATION OF
; PATHOGENS
; NUMBER OF SEQUENCES: 165
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MEDLEN & CARROLL
; STREET: 220 MONTGOMERY STREET, SUITE 2200
; CITY: SAN FRANCISCO
; STATE: CALIFORNIA
; COUNTRY: UNITED STATES OF AMERICA
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA: US/09/940,925A
; FILING DATE: 10-Jun-2002
; CLASSIFICATION: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: CARROLL, PETER G.
; REGISTRATION NUMBER: 32,837
; REFERENCE/DOCKET NUMBER: FORS-01756
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 705-8410
; TELEFAX: (415) 397-8338
; INFORMATION FOR SEQ ID NO: 139:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 620 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; SEQUENCE DESCRIPTION: SEQ ID NO: 139:
US-09-940-925A-139
Query Match 87.7%; Score 618.4; DB 10; Length 620;
Best Local Similarity 99.8%; Pred. No. 5.4e-148;
Matches 619; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 36 ATCAATCCGGCGGTGTCGCCGATCAAGAGTTCCTCGGCACCGCAGCTGAGC 95

